

JUDICIARY SQUARE MASTER PLAN – WASHINGTON, DC



APPENDIX 2 ENVIRONMENTAL ASSESSMENT

Lead Agencies:
**National Capital Planning Commission
The District of Columbia**

Cooperating Agency:
General Services Administration

24 JUNE 2003

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Comment on this Environmental Assessment must be provided to the following:

**National Capital Planning Commission
401 9th Street, NW, Suite 500, North Lobby
Washington, DC 20576**

E-mail and facsimile comments may be submitted to gene.keller@ncpc.gov, fax number 202-482-7272. Comments should be submitted no later than **July 25, 2003**.

Note to Reviewers and Respondents:

Comment on this environment assessment, including names and home addresses of respondents, are available as a matter of record, unless specifically indicated by the commenter that such information is not to be available. Individual respondents may request that private e-mail or home addresses be withheld from the record and will be honored to the extent allowable by law. If you wish to have such conditions apply to your comments, **you must** state this requirement prominently at the beginning of your comment.

24 JUNE 2003

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CHAPTER 1: PURPOSE & NEED FOR THE PROPOSED ACTION

1.0 PURPOSE AND NEED FOR PROPOSED ACTION

1.1 Introduction

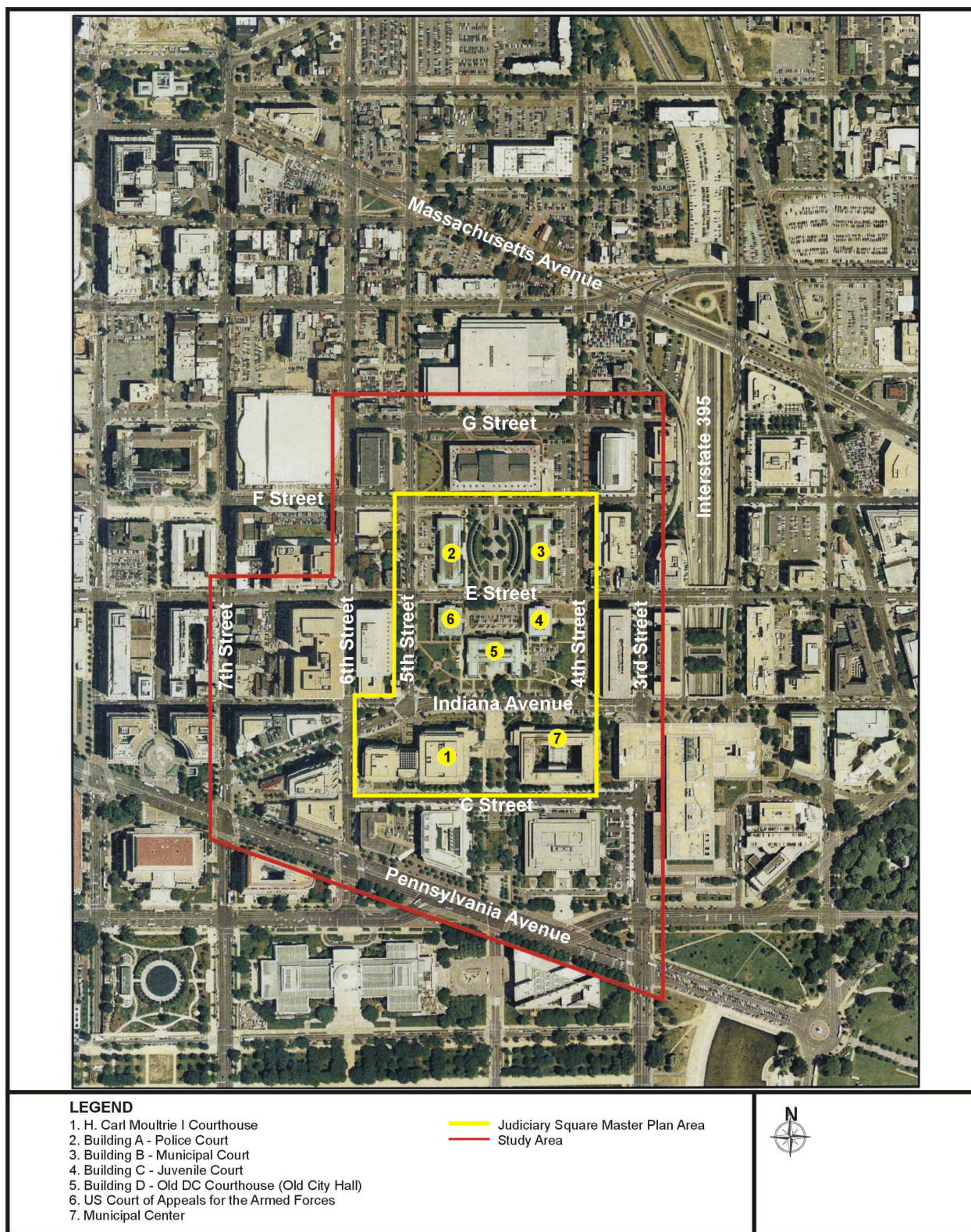
The District of Columbia Courts (hereafter the DC Courts) has prepared a Master Plan for the Judiciary Square area, as requested by the National Capital Planning Commission (NCPC) in November 2002. The Master Plan is part of the efforts by the DC Courts to expand and improve its physical facilities at this location. The Master Plan establishes a framework for further development in the area of Northwest Washington DC bounded on the north by F Street, on the south by C Street, on the east by 4th Street, and on the west by 5th Street, Indiana Avenue, and 6th Street (see Figure 1-1: Project Location Map, and Figure 1-2: Master Plan Area). The site area includes the right of ways of these streets and is referred to as the Master Plan area in this document.

This Environmental Assessment (EA) has been prepared in accordance with the National Environmental Policy Act of 1969, as amended (NEPA) and the Council on Environmental Quality (CEQ) Regulations (40 CFR 1500-1508) implementing NEPA. NCPC is the lead federal agency in the development of the Master Plan for NEPA purposes. The District of Columbia Courts and NCPC are fulfilling joint lead agency roles in the development and review of the NEPA process. Both federal and local jurisdictional decisions will utilize information derived from the NEPA documentation.

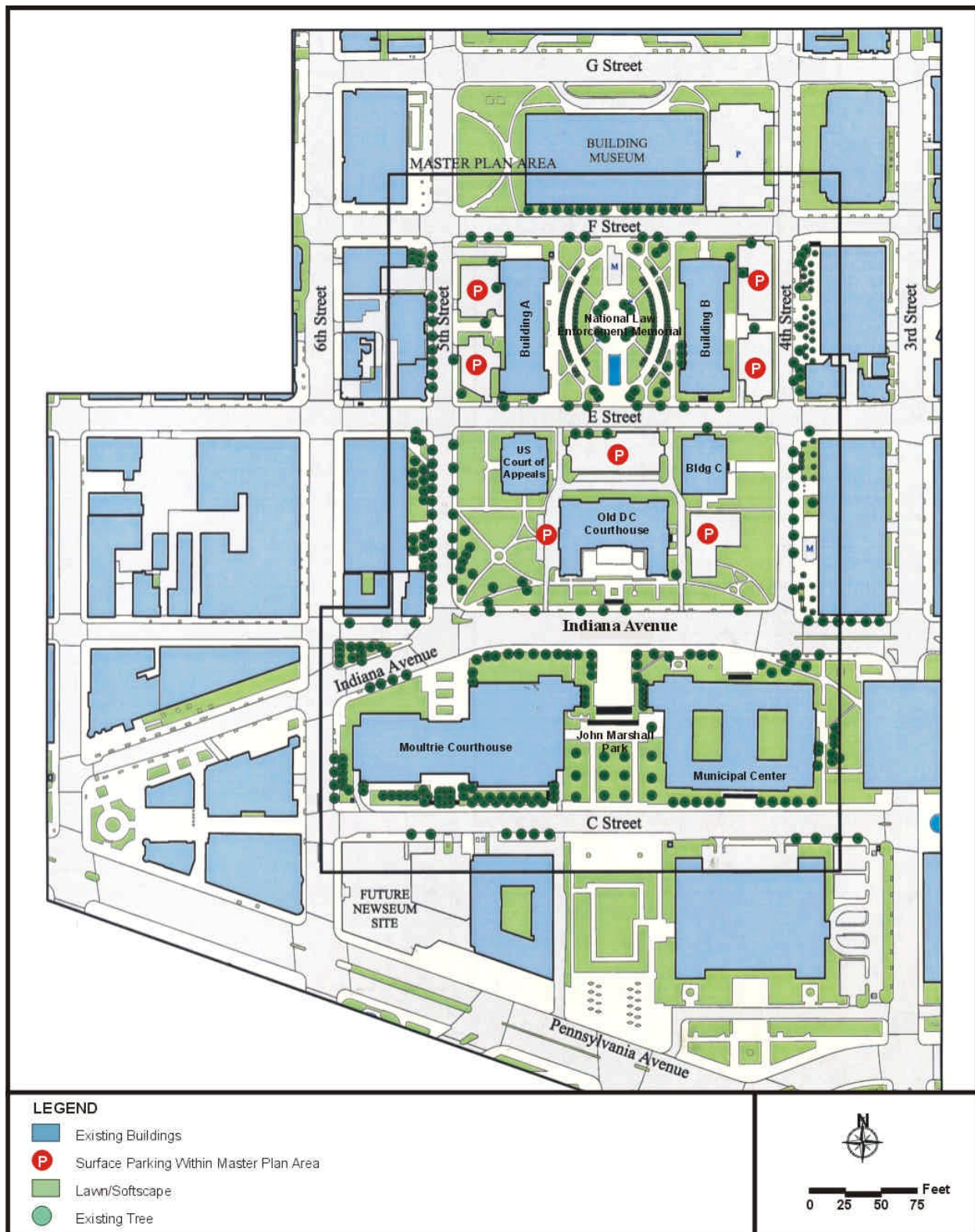
This EA describes the purpose and need for the proposed Master Plan, the existing conditions of the area potentially affected, and the potential impacts to the natural and human environment. Information provided in this EA was obtained from the DC Courts, and the architects and engineers retained by the DC Courts for this project.

1.2 Purpose and Need for the Proposed Action

The proposed action that is the subject of this EA is the implementation of the proposed Judiciary Square Master Plan. The Master Plan consists of a long-term vision for the Judiciary Square area, along with guidelines for implementing that vision. The Judiciary Square Master Plan encompasses 29 acres, including seven buildings, seven roadways, seven surface parking lots, and scattered open space. Five buildings belong to the DC Courts (including the vacant Old DC Courthouse Building, which is also called the Old City Hall); one building is the Municipal Center that houses the Metropolitan Police Department, the Department of Motor Vehicles and other DC government offices; and one building belongs to the United States Court of Appeals for the Armed Forces.



**Figure 1-1: Project Location Map
(Aerial Photograph)**



**Figure 1-2: Master Plan Area
(Existing Conditions)**

In 2001, the United States Congress passed legislation¹ that requires the DC Courts to provide an independent DC Family Court, in lieu of its current existence as a division of the DC Superior Court. In response to the legislation, a facilities study² was prepared for the DC Courts that examined four of the five DC Courts Buildings, and utilized another study³, to conclude that by 2012 the DC Courts would require an additional 132,000 square feet of occupiable space. The facilities study recommended renovation/expansion of the Moultrie Courthouse, renovation and expansion of the Old DC Courthouse Building, modernization of the existing DC Courts Buildings A, B and C, and the construction of new underground parking garages.

In addition to the recommended changes proposed by the facilities master plan, there are two current projects proposed in the Judiciary Square area. These include: an underground garage located to the west of the Old DC Courthouse (Garage #1) to replace existing surface parking and provide secure parking for the US Court of Appeals and the DC Courts; and a new National Law Enforcement Museum proposed to the south of the existing National Law Enforcement Memorial, as authorized by the US Congress⁴.

Due to the proposed changes anticipated in the Judiciary Square area, most of which have been proposed on behalf of the DC Courts, NCPC requested that a Master Plan be prepared that provides the DC Courts with a comprehensive development plan for the Judiciary Square area. In accordance with the National Capital Planning Act of 1952, as amended, NCPC has approval authority for a master plan that is prepared by an agency prior to preparation and submission of site and building plans for individual projects to the Commission.

1.3 Public Involvement and Agency Coordination

The preparation of the Judiciary Square Master Plan has involved numerous meetings with various agencies and groups. Further, a public meeting was held on April 15, 2003 to present existing condition findings for the area, share the proposed goals and objectives of the Plan, and seek public input on the scope of the EA.

The governmental review agencies that were consulted include: the District of Columbia Department of Transportation (DOT), Office of Planning, and State Historic Preservation Office, the General Services Administration (GSA), NCPC, the National Park Service (NPS), and the U.S. Commission of Fine Arts. In addition, several public organizations located in the Judiciary Square area were involved in the stakeholder coordination effort, including: the Embassy of Canada, the Metropolitan Police Department, the National Building Museum, the National Law Enforcement Museum, the Newseum, the U.S. Court of Appeals for the Armed Forces, the U.S. Marshal's Office, the U.S. Federal Courts, and the Washington Metropolitan Area Transit Authority (WMATA). The public outreach component included meetings with community organizations, including: the Advisory Neighborhood Commission, Committee of 100 on the Federal City, and Green Spaces for DC.

¹ District of Columbia Family Court Act of 2001, Senate Bill 1382 Session, 107th Congress.

² *District of Columbia Master Plan for Facilities*, Metropolitan Architects and Planners Inc. and Gruzen Samton, LLP, 2002.

³ *Old DC Courthouse Modernization Study*, Karn Charuhas Chapman & Twohey, 2001

⁴ Public Law 106-492 106th Congress, 11-9-00 National Law Enforcement on federal land in the District of Columbia.

1.4 Issues Studied in Detail

This EA document examines the potential impacts of the proposed Master Plan on the following resource disciplines: Socio-economic Resources, Cultural Resources, Transportation Resources, Physical and Biological Resources, and Utilities/Infrastructure. Issues of particular concern include land use, historic resources, visual quality, traffic and parking, pedestrian circulation, and stormwater management. The following table provides a summary of the potential impacts of the two alternatives assessed in this EA:

Table 1-1
Summary of Potential Impacts

RESOURCE	MASTER PLAN ALTERNATIVE	NO ACTION ALTERNATIVE
SOCIO-ECONOMIC RESOURCES		
Land Use; Planning Policies; Community Facilities; Demographic & Environmental Justice; Economic/Fiscal Resources	<u>Potential Impacts</u> <ul style="list-style-type: none"> • Consistent with established land uses in the study area. • Positive impact due to removal of surface parking and restoration of landscaped areas. • Would comply with the <i>Federal Elements</i> of the <i>Comprehensive Plan for the National Capital</i>. • Generally consistent with local zoning except that Garages 1 and 2 would be dedicated to all day commuter parking. 	<u>Potential Impacts</u> No improvements to land use in Judiciary Square.
CULTURAL RESOURCES		
Archaeological Resources; Historic Resources; Visual Resources	<u>Potential Impacts</u> <ul style="list-style-type: none"> • Potential cumulative adverse effect to the visual relationship between the historic buildings on Judiciary Square, including the Pension Building (National Building Museum) due to the proposed addition to Old DC Courthouse and construction of the National Law Enforcement Museum (NLEM). • Positive effect to historical character due to removal of surface parking and open space improvements. • Positive effect due to renovation and reuse of Old DC Courthouse. • Potential adverse effects on structural integrity of existing historic structures due to construction of parking garages. • Potential minor adverse effects to existing vistas due to new access ramps, appurtenances, and security features. <u>Mitigation</u> <ul style="list-style-type: none"> • Ensure that construction of underground garages will not compromise the structural integrity of adjacent historic buildings. • Construct the proposed addition to the Old DC Courthouse in compliance with the Secretary of Interior's Standard to ensure architectural and visual compatibility. • Implement Plan elements to adhere to conditions of the Section 106 Memorandum of Agreement. 	<u>Potential Impacts</u> No effects to historic resources and no enhancement of visual quality.

TRANSPORTATION		
Roadway Traffic; Parking Availability & Proximity; Public Transportation; Pedestrian/ Bicycle Circulation	<u>Potential Impacts</u> <ul style="list-style-type: none"> No impact on traffic volumes. Minor positive impact on traffic circulation. Moderate short-term impacts to existing parking due to construction of parking garages and narrowing of streets. Minor positive impact due to net increase of 36 reserved parking spaces and 18 public spaces. Major positive impact on pedestrian circulation due to proposed improvements of the pedestrian paths. <u>Mitigation</u> <ul style="list-style-type: none"> Minimize loss of restricted parking during construction by constructing Garages #2 and #3 prior to demolition of surface and on-street parking. 	<u>Potential Impacts</u> No traffic circulation improvement to area and continued difficulties with on-street parking.
PHYSICAL/BIOLOGICAL RESOURCES		
Air Quality; Noise Levels; Natural Resources ; Hazardous Materials	<u>Potential Impacts</u> <ul style="list-style-type: none"> Minimal impacts on air quality and noise levels. Positive impact due to increased open space and vegetation in the Master Plan area. Excavated soil for the construction of garages may contain natural or manmade contaminants that would be identified through soil testing prior to construction. <u>Mitigation</u> <ul style="list-style-type: none"> Dispose off any hazardous materials that may be encountered in a manner that is consistent with applicable laws. 	<u>Potential Impacts</u> No increase in vegetation and open space in the area.
UTILITIES/INFRASTRUCTURE		
Stormwater Systems; Wastewater Systems; Water Supply Systems; Energy Supply Systems; Solid Waste Systems	<u>Potential Impacts</u> <ul style="list-style-type: none"> Addition of green open space would help in reducing stormwater runoff during peak storm periods. 	<u>Potential Impacts</u> No improvement to stormwater management in the area.

1.5 Other Projects in the Area

There are three projects not under the control of DC Courts that could have cumulative effects on the Master Plan area. One project is located within the Master Plan area, and two are in the vicinity of the Judiciary Square area. The potential cumulative projects include:

- A new museum, the National Law Enforcement Museum is being planned for the area bounded by the National Law Enforcement Memorial to the north, the US Court of Appeals to the west, Building C to the east, and the Old DC Courthouse to the south. This museum will add approximately 85,000 GSF of space, most of which would be underground. The legislation provides for two above-ground entrance pavilions totaling 10,000 SF, neither of which shall exceed 6,000 SF.
- Another new project, the Newseum, is planned for the northeast corner of the intersection of Pennsylvania Avenue and 6th Street, NW. The 531,000 GSF project is anticipated to commence construction in 2003. It will include approximately 260,000 GSF of museum space, 145,000 GSF of housing, 30,000 GSF of retail, 30,000 GSF of offices, 9,000 GSF for a conference center, and 57,000 GSF for an underground parking garage.
- The E. Barrett Prettyman Federal Courthouse, located on the north side of the intersection of Constitution Avenue and Pennsylvania Avenue, is currently undergoing renovation and expansion. The existing building consists of 580,489 GSF and houses federal courts. A 350,000 GSF, six story annex that will support the court functions is currently under construction along the east façade of the existing building.



CHAPTER 2: ALTERNATIVES CONSIDERED

2.0 ALTERNATIVES CONSIDERED

2.1 Introduction

The proposed action that is the subject of this EA is the implementation of the Judiciary Square Master Plan that consists of a long-term vision for the Judiciary Square area. This EA analyzes two alternatives: the Master Plan Alternative, and the No Action Alternative.

2.2 Master Plan Alternative

The proposed Judiciary Square Master Plan is a framework document that identifies a vision for the Judiciary Square area, an area that includes seven buildings and several open space components. The Master Plan area is bounded on the north by F Street, on the south by C Street, on the east by 4th Street, and on the west by 5th Street, Indiana Avenue, and 6th Street. To implement the vision, the Master Plan recommends several changes to the area, including improvements and guidelines for facilities, open space, circulation, and security.

Proposed Master Plan Vision, Goals and Objectives

The Master Plan vision for the Judiciary Square area can be summarized as “creating a green precinct”. This would be accomplished by defining a strong landscaped edge, creating an active Square with pedestrian paths, and enhancing north-south linkages and views. As part of achieving this vision, the Master Plan identifies eleven Goals and Objectives:

- create defined public open spaces;
- preserve and enhance historic resources and vistas;
- remove existing surface parking lots;
- coordinate upcoming projects with a unified landscape concept;
- improve the pedestrian circulation system;
- improve the service to buildings within the Square;
- create a mixed-use setting embracing activities surrounding the Square;
- enhance building security with sensitive landscape and streetscape features;
- reduce traffic congestion;
- minimize vehicle/pedestrian conflicts; and,
- integrate future development of court facilities into the Judiciary Square Community.

Proposed Facility Improvements Recommended by the Master Plan

Based on the findings of the facilities study, the DC Courts will require an additional 134,000 occupiable square feet (OSF) by 2012 to accommodate its space needs. The Master Plan provides for and incorporates the space needs of the DC Courts, and (as illustrated in Figure 2-1: Proposed Master Plan Improvements) recommends the following improvements for open space, security, and circulation within Judiciary Square:

- Renovation and expansion of Moultrie Courthouse: The existing court building consists of 654,000 gross square feet (GSF). The Master Plan proposes renovations and additions to the building that would accommodate the DC Family Court and the DC Superior

Court. One addition would add 80,000 GSF along C Street to create an entrance for the Family Court. A second addition of approximately 12,500 GSF on the Indiana Avenue Plaza would create a separate entrance for the Superior Court. The renovations and additions are anticipated to be completed by the end of 2009.

- Renovation and expansion of the Old DC Courthouse Building (Old City Hall): The Old Courthouse Building is currently vacant. It consists of 99,600 GSF. The Master Plan includes the proposed renovation and expansion of this facility to accommodate the DC Court of Appeals. This expansion would be located to the north of the existing facility and would allow for a secure and accessible entrance to the facility. The expansion would consist of approximately 34,700 GSF of space below ground and approximately 2,700 GSF of space above ground. The building is anticipated to be occupied by 2007.
- Renovation and modernization of Buildings A and B: The Master Plan includes the proposed renovation and modernization of these 221,000 GSF structures that would accommodate some of the other court systems, including Landlord & Tenant, Small Claims, and Probate Courts. Building A is anticipated to be renovated by the end of 2008, while Building B is anticipated to be renovated by the end of 2010.
- Acquisition and modernization of Building C: The Master Plan takes into consideration the proposed acquisition of this 44,000 GSF building for the accommodation of other functions of the DC Courts.
- Construction of a new underground garage to the west of the Old DC Courthouse (Garage #1): The Master Plan provides for a 250-space underground parking garage to the west of the Old DC Courthouse Building. This garage would replace existing surface parking spaces adjacent to the Old DC Courthouse and would provide parking spaces for employees of the District of Columbia Court of Appeals (proposed occupants of the Old DC Courthouse), and the United States Court of Appeals for the Armed Forces. The garage entrance and exit would be located on 5th Street. It is anticipated to be completed by the end of 2006.
- Construction of a new underground garage to the east of Building B (Garage #2): The Master Plan locates a 150-space underground parking garage to the east of Building B, at the intersection of 4th and F Streets. This garage would replace existing surface parking that is located to the east of Building B, and would provide spaces for employees within the Building. The garage would be accessed off F Street.
- Construction of a new underground loading dock and parking garage (Garage #3) to the east the Old DC Courthouse: The Master Plan accommodates an underground service loading dock to the east of the Old DC Courthouse to serve the Old DC Courthouse Building and Building C. In addition, the plan identifies the space below the existing open space at this location as a site for a third parking garage with 150 parking spaces. The date of completion for the service loading dock is anticipated to be 2007. There is no date for completion of the parking garage at this time.

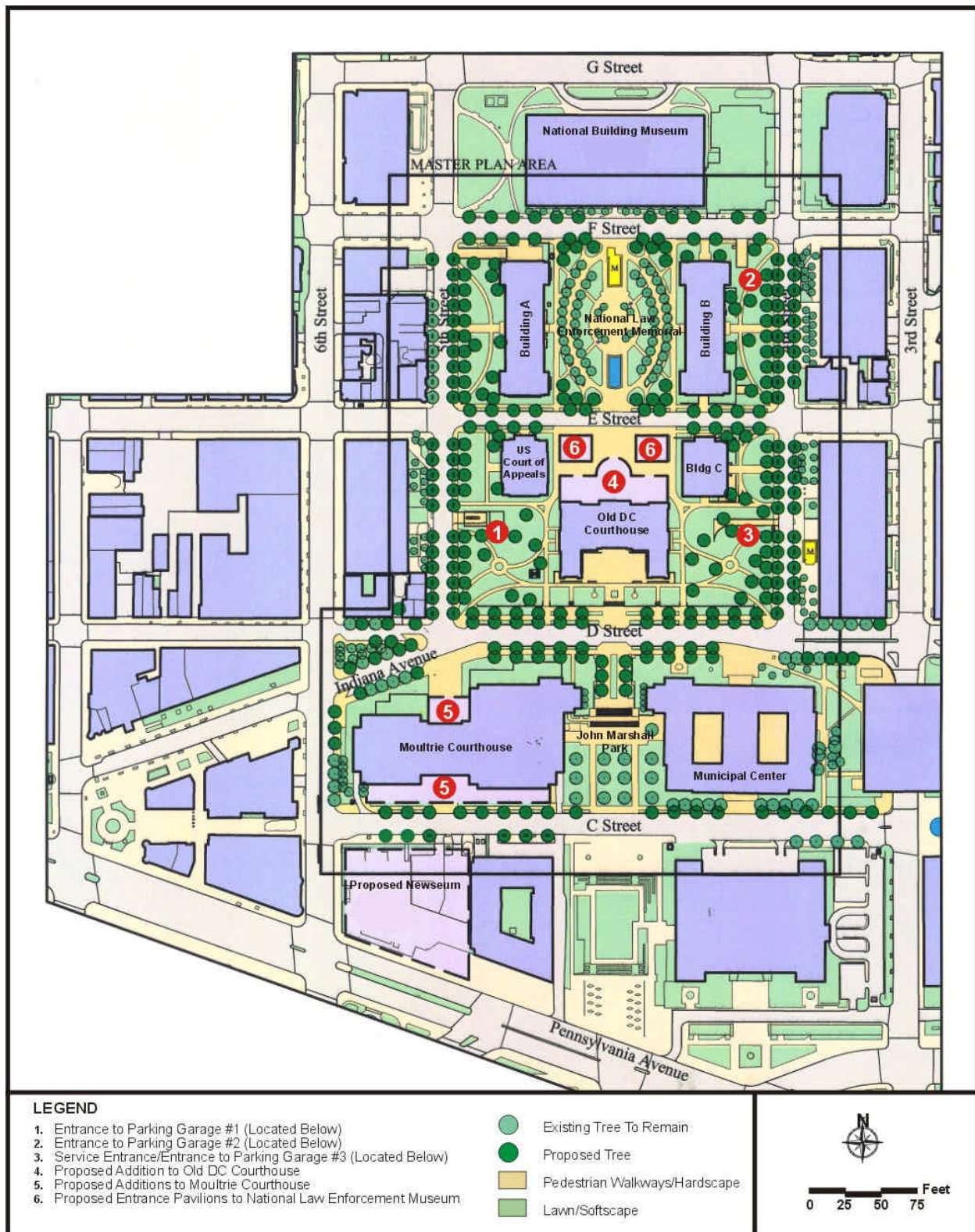


Figure 2-1: Proposed Improvements within the Master Plan Area

Proposed Master Plan Guidelines

In addition to taking into consideration facility improvements to house the DC Courts, the Master Plan recommends open space controls, vehicular and pedestrian circulation, and security guidelines for the Judiciary Square area. Within these categories, the Master Plan recommends the following:

- Open Space Controls – The Master Plan recommends improving the open space character of the Judiciary Square Area. It proposes eliminating surface parking, enhancing pedestrian paths, widening sidewalks, and restoring the historical landscape of the Square to the extent feasible. Specifically, the Plan proposes the following (see Figure 2-2):
 - Remove existing surface parking located adjacent to Buildings A, B, C, the Old DC Courthouse, and the US Court of Appeals.
 - Reintroduce landscaped open space to the west of Building A, east of Building B, east and south of Building C, and east and south of the US Court of Appeals Building.
 - Improve the quality of the John Marshall Park.
 - Widen the sidewalk along the northern portion of Indiana Avenue, and on both sides of E Street.
 - Provide distinct landscape guidance along the southern portion of Indiana Avenue, the eastern portion of 4th Street, and the western portion of 5th Street.
 - Provide decorative pavement on Indiana Avenue in the portion between John Marshall Park and the Old Courthouse Building, and along E Street in the portion between the National Law Enforcement Memorial and the proposed National Law Enforcement Museum (NLEM).
- Circulation Guidelines – The Master Plan proposes the following circulation guidelines (see Figure 2-3):
 - Provide vehicular access to Garage #1 (west of the Old DC Courthouse Building) off 5th Street.
 - Provide vehicular access to Garage #2 (east of Building B) off F Street.
 - Provide vehicular access to the service loading dock and Garage #3 (east of the Old Courthouse Building) off 4th Street.
 - Provide bus lay-bys along F Street and C Street.
 - Improve pedestrian circulation within the Square with primary pedestrian access to the various buildings within Judiciary Square as follows – the western face of Building A, the eastern face of Building B, the eastern face of Building C, the northern face of the Old DC Courthouse Building, the northern face of the US Court of Appeals, the northern faces of the proposed entrance structures to the NLEM, and the northern and southern faces of Moultrie Courthouse.
 - Provide ADA accessible entrances to the various buildings within Judiciary Square as follows – the eastern face of Building C, the northern face of the Old DC Courthouse Building, the northern faces of the proposed entrance structures to the NLEM, the eastern face of the US Court of Appeals, and the northern and southern faces of Moultrie Courthouse.

- Security Guidelines – Due to the greater security measures required in recent years for governmental buildings, the Master Plan proposes a combination of hardened streetscape elements, plinth walls, and bollards to protect the various buildings within Judiciary Square, while promoting pedestrian movement through the Square (see Figure 2-4). The recommended measures include:
 - Provide plinth walls, between 18” and 30” in height, along the western edge of the 4th Street R.O.W. and along the eastern edge of the 5th Street R.O.W. with openings for pedestrian movement and vehicular access to the parking garages and the service loading dock.
 - Provide plinth walls, between 18” and 30” in height, along either side of the Indiana Avenue R.O.W., with openings for pedestrian movement. These openings would be lined with bollards to restrict vehicles from passing through.
 - Provide a combination of hardened streetscape elements and bollards along either side of the E Street R.O.W., with retractable bollards to allow service vehicles to access the National Law Enforcement Museum.
 - Provide a combination of hardened streetscape elements and bollards along the southern edge of the F Street R.O.W.
 - Provide a combination of hardened streetscape elements and bollards along the northern edge of the C Street R.O.W.

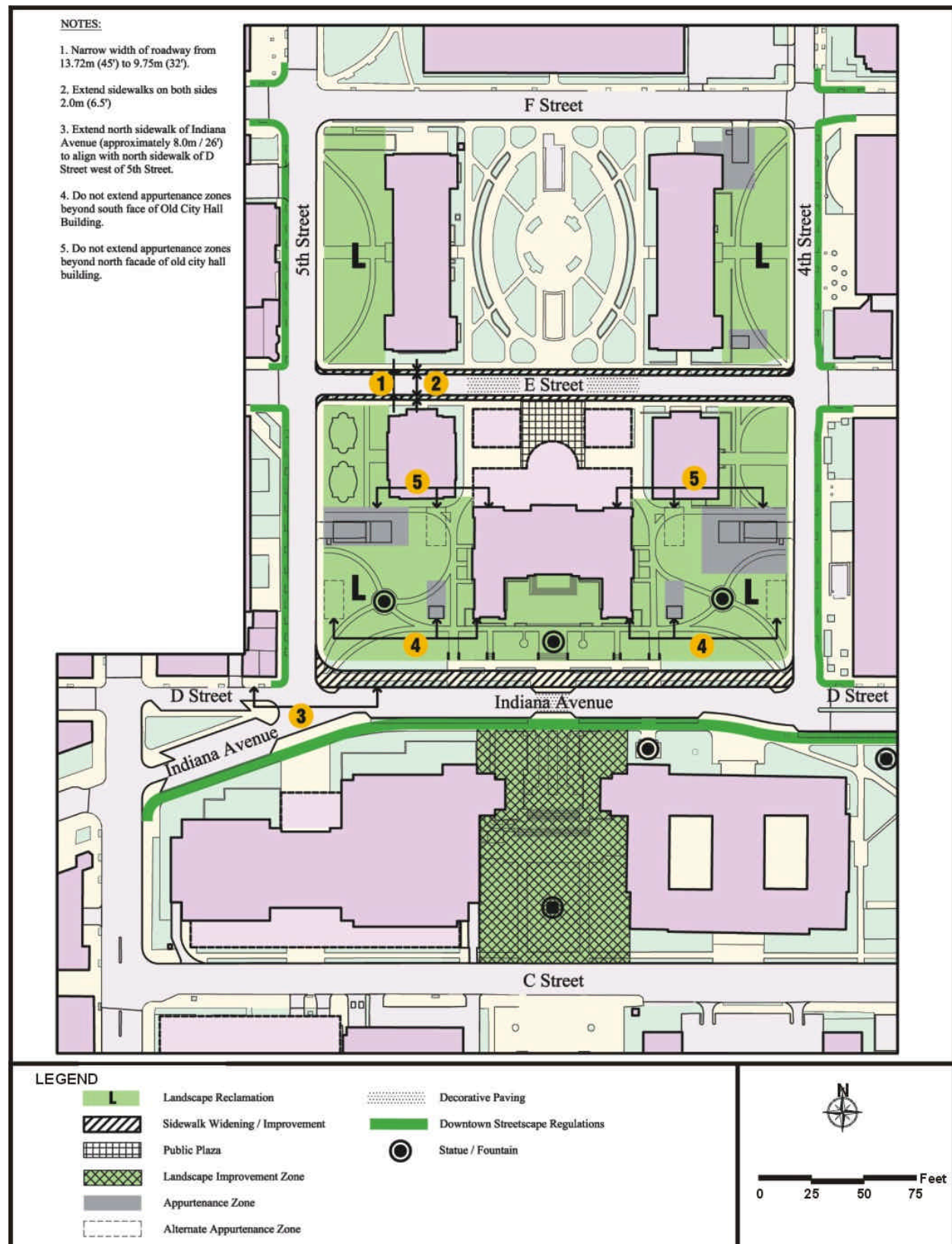


Figure 2-2: Open Space Guidelines

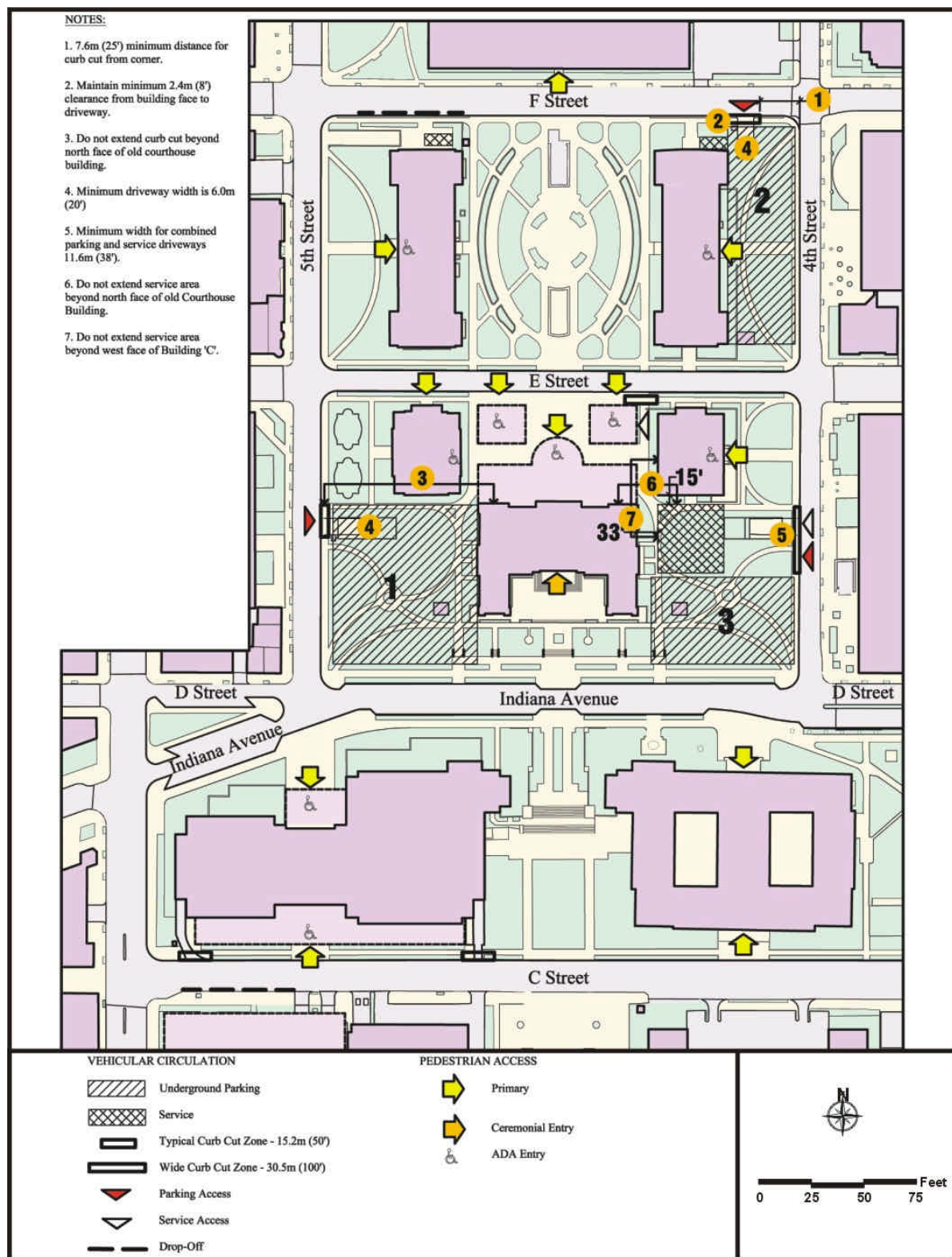


Figure 2-3: Circulation Guidelines

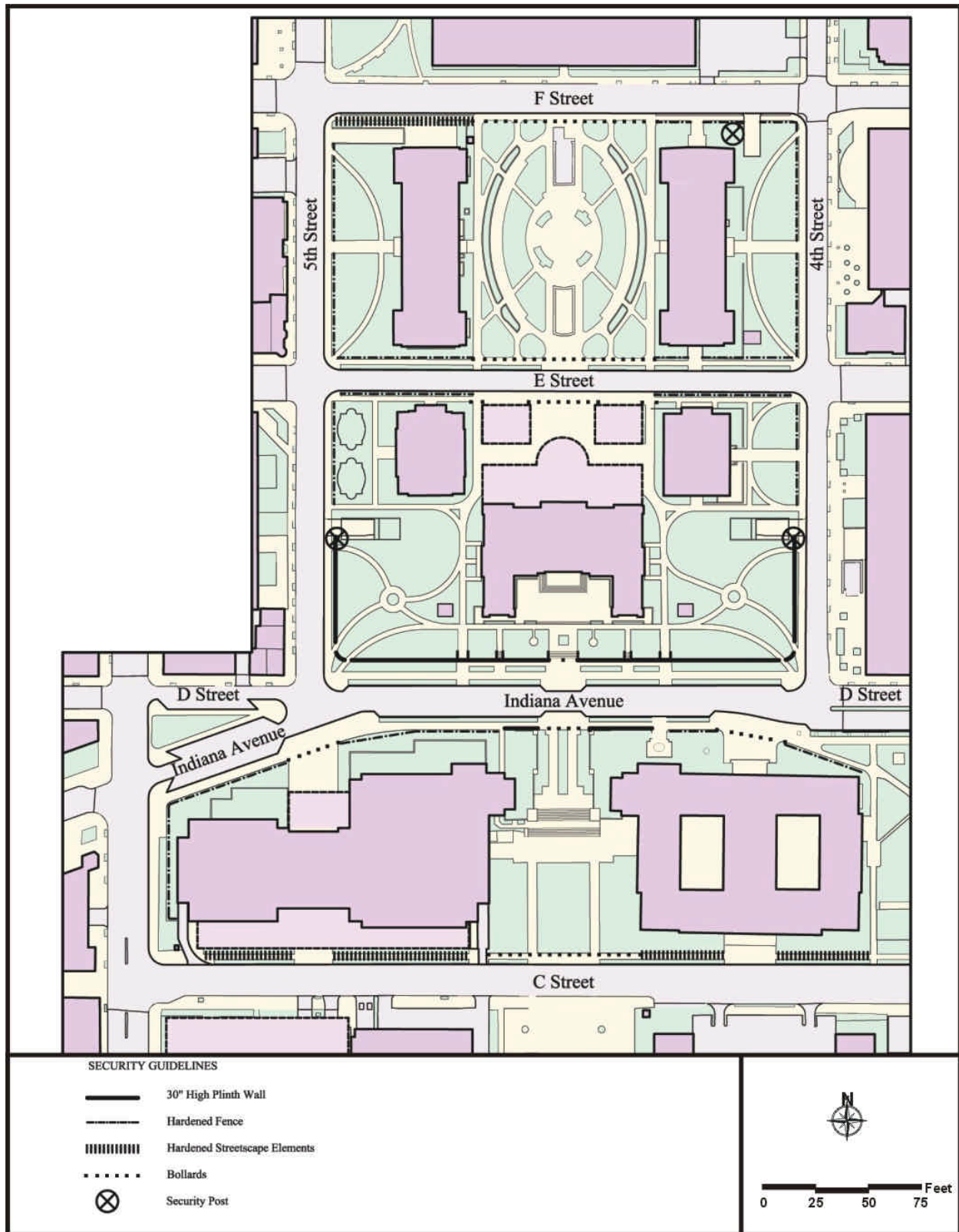


Figure 2-4: Security Guidelines

2.3 No Action Alternative

The No Action Alternative assumes that Judiciary Square would continue to function in its current configuration. The existing facilities would not be expanded or modernized, no underground parking garages would be constructed, perimeter security measures would not be implemented, and the open spaces would not be improved.

Under the No Action Alternative, it is assumed that the DC Courts would be unable to accommodate the new DC Family Court at Judiciary Square. Since the establishment of an independent Family Court has been authorized by Congress, implementation of the No Action Alternative would require further efforts to establish a Family Court elsewhere in Washington, DC.

2.4 Alternatives Considered But Eliminated

During the preparation of the Master Plan, several alternatives were examined but eliminated. These differed specifically in the location of Garage #2, access to Garage #1, and the provision of services to the Old DC Courthouse Building. These alternatives were eliminated for a variety of reasons. The alternatives are briefly discussed below:

- *Garage/Access Option 1:* This option examined a combined garage that would be located to the west of the Old DC Courthouse and that would extend from D Street to F Street. The access to this garage would be off 5th Street. A service area would be located to the east of the Old DC Courthouse with access off 4th Street, similar to the Master Plan Alternative. This option would require the US Court of Appeals to relocate the recently installed chiller units and would be a major additional cost, as well as add to the project complexity.
- *Garage/Access Option 2:* This option examined a second garage that would be located to the east of the Old DC Courthouse with access off 4th Street. An open air service area would be located above the garage with an entrance off E Street. The open air service area would create visual clutter adjacent to the Old DC Courthouse and Building C.
- *Garage/Access Option 3:* This option examined a second garage that would be located similar to Option 2, to the east of the Old DC Courthouse with access off 4th Street. A surface service area would be located to the east of the Old DC Courthouse, above the first parking garage, and would be accessed off E Street. The surface service area would create visual clutter adjacent to the Old DC Courthouse and the US Court of Appeals.
- *Garage/Access Option 4:* This option examined a second garage that would be located similar to Option 2, to the east of the Old DC Courthouse. It examined access to both the garages off E Street. A service area would be located to the east of the Old DC Courthouse, below ground, combined with the parking garage with a separate access off 4th Street. E Street is heavily traveled, and access to both garages off this street would impact operational efficiency and safety at the adjacent intersections.

- Garage/Access Option 5: This option examined a larger second garage that would be located to the east of the Old DC Courthouse and would extend below Indiana Avenue to accommodate additional parking spaces. The garage would be accessed off 4th Street. A surface service area would be located to the east of the Old DC Courthouse and would be accessed off E Street. The open air service area would create visual clutter adjacent to Old DC Courthouse and Building C.



CHAPTER 3: AFFECTED ENVIRONMENT

3.0 AFFECTED ENVIRONMENT

For the purposes of this EA, the Master Plan area is the area considered to be directly influenced by the Judiciary Square Master Plan. It is generally bounded by F Street, 4th Street, C Street and 6th Street in Northwest Washington, DC. The study area extends outside the Master Plan area and has the potential to be indirectly influenced by the Master Plan. This larger area is generally bounded by G Street, 3rd Street, Pennsylvania Avenue and 7th Street, E Street and 6th Street to the west. These areas were presented earlier in Figure 1-1: Project Location Map.

3.1 Socio-Economic Resources

3.1.1 Land Use

Master Plan Area

One of the original reservations in the L'Enfant plan, the Judiciary Square Master Plan area consists of twenty-nine acres located mid-way between the White House and the Capitol Building, north of Pennsylvania Avenue. The Master Plan area includes four city blocks and surrounding streets.

The Master Plan area contains seven monumental civic buildings, all serving municipal or judicial functions. Six of the seven buildings are owned by the DC government, while the seventh belongs to the U.S. Court of Appeals for the Armed Forces. Of the DC government buildings, five are under the jurisdiction of the DC Courts, and the sixth is the Municipal Center that houses the Police Department, Department of Motor Vehicles, and other various DC government offices. One of the Courts buildings, the Old DC Courthouse (also called the Old City Hall), is not currently occupied (see Figure 3-1: Existing Uses in the Study Area).

The Master Plan area also includes almost 18 acres of open space and surface parking in the center and edges of Judiciary Square. This includes a combination of small urban parks, seven surface parking lots, and circulation space between buildings, parking areas, and streets. In the northernmost block, between Buildings A and B, is the Law Enforcement Officers Memorial. Dedicated in 1991, the Memorial is defined by a central plaza framed by a lawn, a double row of trees and a free-form curvilinear wall on both sides forming an elliptical shape. An entrance to the Judiciary Square Metrorail Station sits at the northern end of the Memorial, and a reflecting pool is located at the southern end close to E Street.

Three distinct parks occur within the Master Plan area. The first of these is located in the central block, west of the Old DC Courthouse. It is a traditional urban park with brick walkways, lawn open space, shade trees, and a fountain. Mirroring this park on the east side of the Old DC Courthouse is a more casual park with open lawn, picnic tables, and a split rail fence. Finally, John Marshall Park is located in the southernmost block and evolves from an urban plaza near D Street, to more open lawn to the south. There is a substantial grade change in this park, allowing for an open vista from the Old DC Courthouse to Pennsylvania Avenue and the National Mall.

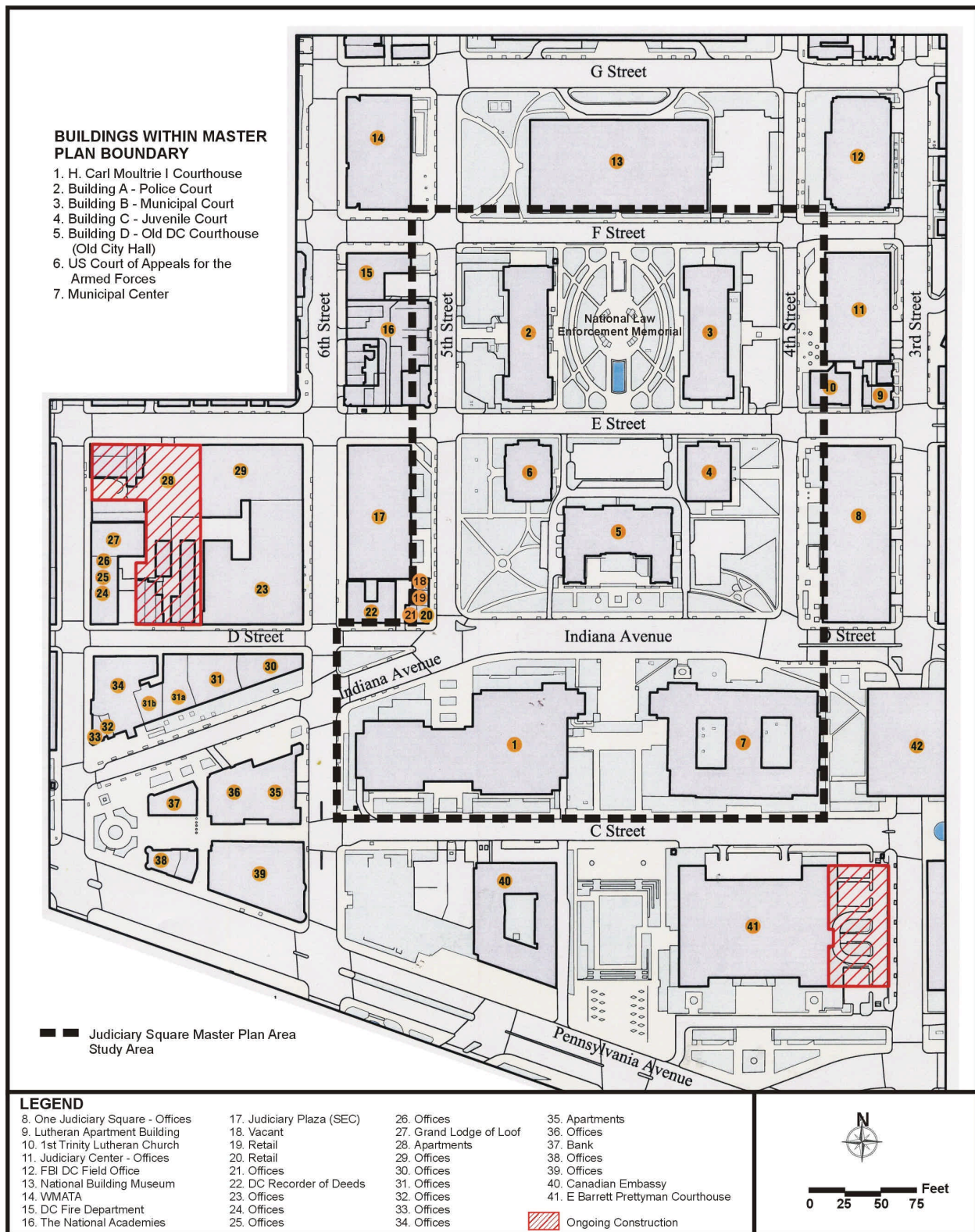


Figure 3-1: Existing Uses in the Study Area

Study Area

The area surrounding Judiciary Square is generally referred to as the “east end” of Downtown and has been undergoing a recent revitalization. North and west of the site is an emerging mixed-use commercial and residential area, as well as large entertainment uses including the MCI Center and the new Convention Center. In addition, arts and small scale entertainment uses line 7th Street, creating a small cultural arts district. The National Building Museum sits immediately north of F Street.

South of the site, commercial and federal uses line Pennsylvania Avenue, NW. Prominent buildings directly south of the Master Plan area across C Street include the E. Barrett Prettyman Federal Courthouse and the Canadian Embassy. East of the site, the area is characterized by commercial and institutional uses. Two blocks east of the Master Plan site, Interstate-395 separates the area from development further east.

Several projects are planned for construction over the next few years. These include: the National Law Enforcement Museum, directly north of the Old DC Courthouse; the Newseum, a museum dedicated to television and print journalism, at the corner of 6th Street and Pennsylvania Avenue; an addition to the Prettyman Courthouse, on 3rd Street between C Street and Pennsylvania Avenue; and the Jefferson at Penn Square, a 429-unit residential complex on 7th Street, between D and E Streets. These projects will continue the ongoing revitalization of the area.

3.1.2 Planning Policies

The plans, policies, and regulations that govern land use in the District of Columbia provide a regulatory framework for the proposed action. The applicable regulatory controls are established by the National Capital Planning Commission (NCPC), the District of Columbia Office of Planning (DC-OP), and the DC Zoning Commission.

Comprehensive Plan for the National Capital, Federal Elements

The *Comprehensive Plan for the National Capital, Federal Elements* (updated in 1990) is the principal planning document adopted by NCPC for the planning of federal facilities. Although the Master Plan is being completed by the District of Columbia Courts, a federal facility – the U.S. Court of Appeals for the Armed Forces – is located within the Master Plan area. In addition, the federal government owns the land on which the Old DC Courthouse is located. Thus, the *Federal Elements* are relevant to the Judiciary Square Master Plan.

The Parks, Open Space, and Natural Features Element recommends the following policies that are applicable to the proposed action:

“Encourage the provision of activities and facilities for both residents and visitors that serve as educational, cultural, and recreational attractions in the region’s National Capital Open Space System, while protecting natural and historic features.”

“Protect and enhance the open space network and functionality of parkways, parks, squares, circles, triangles, and the landscape quality of streets and avenues, which are the legacies of the L’Enfant and McMillan Plans.”

The Preservation and Historic Features Element recommends the following policies that are relevant to the Judiciary Square Master Plan:

“Landscaped green spaces on publicly owned, privately maintained front and side yards in historic districts and on historic landmarks should be preserved.”

“Preserve the important Historic Features of the District while permitting new development that is compatible with those features.”

“Increase awareness of, and access to, facilities, places, and activities essential to residents and visitors.”

“Historic resources should be utilized and protected through the protection of historic landscapes, minimizing effects of automobiles, preserving rights-of-way, and enhancement of green space.”

The Transportation Element further states that:

“In the interest of the efficient use of land and improving the appearance of Federal properties, parking...should be located in structures, to the extent practicable.”

Comprehensive Plan for the National Capital, District Elements

The *District Elements* of the Comprehensive Plan provide long-range policy guidance for planning and development within the District of Columbia. The following policy, from the Public Facilities Element, is applicable to the Judiciary Square Master Plan site:

“Ensure the construction, rehabilitation, and maintenance of facilities essential for public service delivery.”

In addition, the Preservation and Historic Features Element identifies specific policies for Special Places. According to the Plan, special places are defined generally as: having one or more qualities or values that contribute to the design framework of the National Capital; providing a special setting or defining a major scenic or symbolic area; embodying a distinctive functional importance; or having image qualities that establish unique impressions. The Plan recommends the following policy for special places:

“Special streets and places should be maintained and enhanced...when possible with monuments, fountains, sculptures, etc.”

Zoning

The Judiciary Square Master Plan area has several different zoning classifications (see Figure 3-2: Existing Zoning in the Surrounding Area). The majority of the northern two blocks of the site are located within a Special Purpose zoning district (SP-2). This includes the DC Courts Buildings A, B, C and D (Old DC Courthouse), and the U.S. Court of Appeals for the Armed Forces. The SP-2 district is intended to act as a buffer between medium-to high-density commercial and residential districts. It allows a maximum building height of 90 feet and a maximum floor area ratio (FAR) of 3.0 if it is not a residential use. Most uses are allowed under the SP-2 classification, although all day commuter parking is not permitted. In addition, the SP-2 District does not allow on-street or sidewalk retail uses. Between the DC Courts Buildings A and B, the center of the National Law Enforcement Memorial is designated as Government, as are all federal parks within the District of Columbia that are not subject to zoning.

The two southern buildings within the Master Plan area, the Moultrie Courthouse and the Municipal Center, are located within a Major Business and Employment District (C-3-C). The C-3-C district permits medium-to-high density development, including office, retail, housing, and mixed-use development. The maximum FAR for the district is 6.5, with a maximum height of 90 feet and a maximum lot coverage of 100%.

3.1.3 Community Facilities

Community facilities located within the area immediately surrounding Judiciary Square were identified and assessed in the preparation of this EA. These facilities include cultural and religious institutions, educational facilities, parks and recreational resources, and public safety facilities.

Cultural and religious facilities located within the study area include the National Building Museum, at 401 F Street, the National Law Enforcement Officers Memorial between DC Court Buildings A and B, the General George C. Meade Memorial at 3rd Street and Pennsylvania Avenue, the General Albert Pike Memorial at D and 3rd Streets, and 1st Trinity Lutheran Church at 501 4th Street. In addition, the National Law Enforcement Museum is planned for the site immediately north of the Old DC Courthouse and the Newseum is planned to be located adjacent to the Canadian Embassy, between C Street and Pennsylvania Avenue.

Parks located within the study area include the two small urban parks to the east and west of the Old DC Courthouse, and John Marshall Park that connects the Old DC Courthouse with Pennsylvania Avenue. Public safety facilities within the study area include the Metropolitan Police Department located at the Municipal Center and Engine Company No. 2 Fire Station, located at 531 6th Street, west of DC Courts Building A. No public educational facilities are located within the study area.

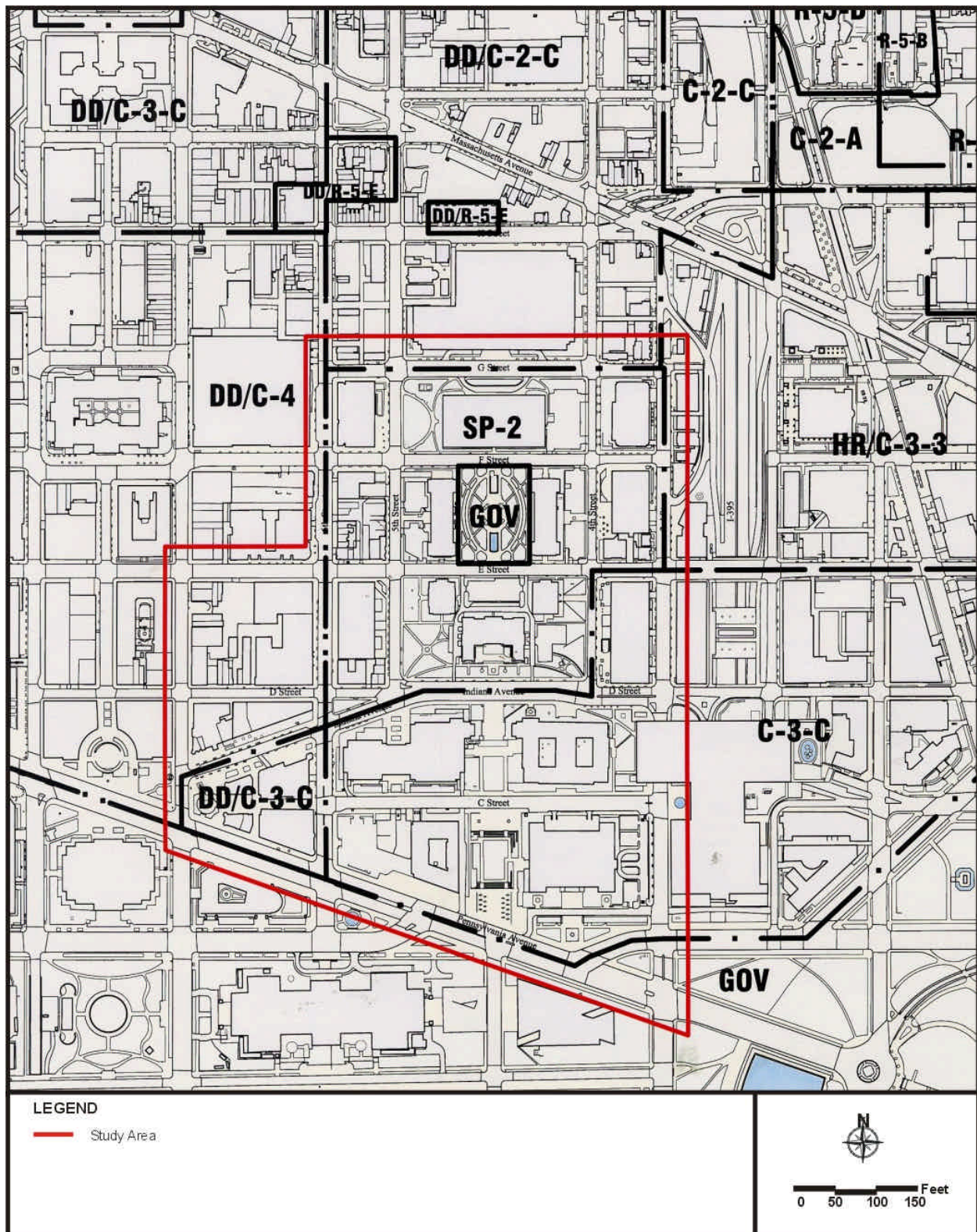


Figure 3-2: Existing Zoning in the Surrounding Area

3.1.4 Demographics/Environmental Justice

The Judiciary Square Master Plan area does not contain any residential units, nor are any residential uses proposed under the Master Plan. The closest residential use is the Lutheran Apartment Buildings one block to the east of the Master Plan area on 3rd Street. The buildings contain 20 units. The next closest residential units will be the proposed residential component of the Newseum development (one block south of the Master Plan area) and the proposed Jefferson at Penn Square (two blocks west).

According to the 2000 Census, Tract 59, which includes Judiciary Square, was 82% black, 9% white, and 9% other races. Compared to the District as a whole, the area had a higher percentage of minority residents, the District average being 69% minority. In addition, 37% of the residents of Tract 59 have incomes below the poverty line, and there are several public and assisted housing sites in the area including Judiciary House at 461 H Street, and the Wah Luck House at 800 6th Street. Thus, Tract 59 qualifies as an Environmental Justice Community of Concern.

3.1.5 Economic/Fiscal Resources

The Washington Coincident Index, which tracks the current state of the Washington, DC economy, declined sharply in February 2003, to its lowest level since January 1996. The Washington Leading Index, which is designed to forecast the state of the metropolitan area economy six to eight months in advance, also declined in February to 108.0, a drop of 1.35 percent. Both indices are down slightly since the same time last year. Nevertheless, the forecast for the metropolitan area economy is generally positive for 2003. First quarter growth was expected only to be modest but positive. Second quarter growth is expected to show some acceleration, especially in May and June (George Mason University, Center for Regional Analysis).

Unemployment rates in the region have risen slightly since January 2003, however, overall rates are down 0.2% since the same time last year. In January 2003, the area added more than 48,000 regular (full-time) jobs compared to January 2002. The number of government jobs has also increased over the last year, from 231,500 jobs in January 2002 to 232,000 jobs in January 2003 (U.S. Department of Labor, Bureau of Labor Statistics).

No property tax is currently received from the Judiciary Square Master Plan area because the buildings and land are owned by the DC or federal governments.

3.2 Cultural Resources

This section details the archaeological, historic, cultural, and visual resources present on the Master Plan area and within the surrounding area. This information is based upon documentation provided in the Judiciary Square Master Plan. In deriving the Area of Potential Effect (APE) for archaeological resources in this EA, it was determined that the only effects on archaeological resources would be those that occur as the result of ground-disturbing construction activities. Therefore, the APE for archaeological resources is the Judiciary Square Master Plan area.

The APE for historic resources was defined based on the potential for new development to be visible from various viewpoints. Thus, the APE for historic resources is generally bounded by Pennsylvania Avenue to the south, 7th Street to the west, G Street to the north, and 3rd Street to the east (see Figure 3-3).

3.2.1 Archaeological Resources

A preliminary archaeological reconnaissance of the Pennsylvania Avenue Development Corporation area was completed in 1979. It addressed a study area encompassing Pennsylvania Avenue to the south, the Capitol to the east, the White House to the west, and E and F Streets generally to the north. The report states that there were three natural springs in the study area, one of which was termed the City Hall spring. The spring was located at the corner of 6th and D Streets (McNett, et al., 1979). Although the report determined that there was a small possibility of prehistoric sites in the study area, the spring was mentioned as having a higher probability of historic potential.

Documentation indicates that a frame building had been built on the square as a hospital for laborers on public projects; it was purchased for use as the Washington County poorhouse in 1801. The Washington Jail, designed by George Hadfield, was constructed on the E Street side of the square in 1802. A second jail, designed by Robert Mills, was built just east of the National Building Museum site in 1841. Hadfield's jail became the Washington Infirmary in 1844. Sanborn Maps dating from the late nineteenth to early twentieth centuries further document that the Moultrie Courthouse and Municipal Center blocks were densely developed at the turn of the century. Historic archaeological remains from these prior uses may be present on the Judiciary Square Master Plan area.

3.2.2 Historic Resources

Judiciary Square was originally established by city designer Pierre Charles L'Enfant when he laid out the original plan for Washington, DC. L'Enfant's plan superimposed an orthogonal grid of streets over a system of avenues radiating from spaces reserved for public use. One of these reservations was Judiciary Square. The Square lies on the same terrace as the White House and the Capitol, implying that, in linking the sites for these three buildings, L'Enfant had in mind a physical relationship that illustrates the checks and balances of the three branches of American government as written into the Constitution.

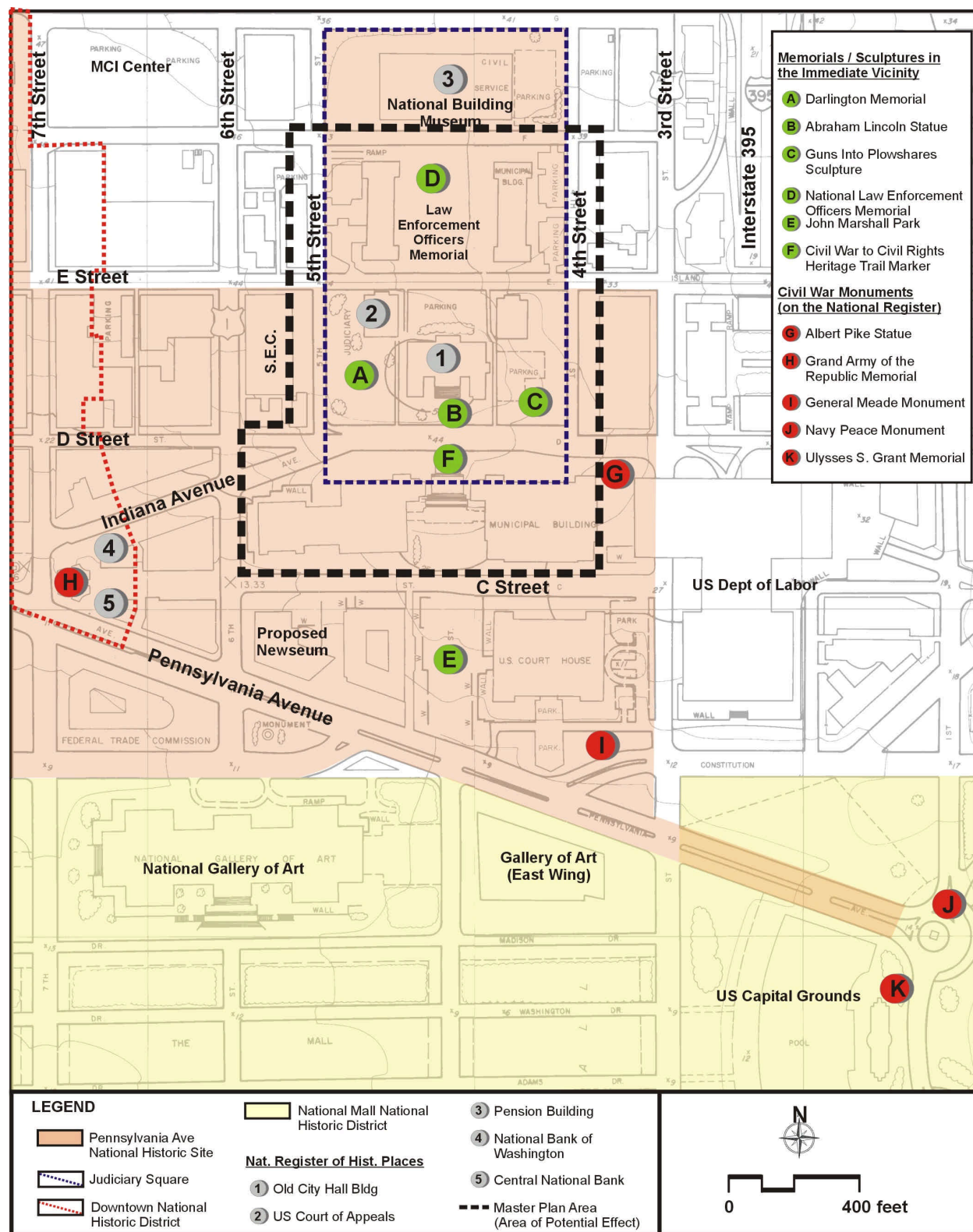


Figure 3-3: Historic Resources in the Area

The first major public building constructed on the Judiciary Square was the Old DC Courthouse (also called the Old City Hall). Designed as the city hall by architect George Hadfield, the Old Courthouse was completed in three stages between 1820 and 1849. The Greek Revival-style building is listed in the DC Inventory of Historic Sites and the National Register of Historic Places. The building is also part of the District of Columbia's Civil War to Civil Rights Heritage Trail.

Besides municipal buildings, residential, commercial, and institutional buildings were also present in the Judiciary Square area in the 19th century. The Square's location, midway between the Capitol and the White House, made it a popular neighborhood for politicians to reside in. Early residents of the area include Senator Thomas Hart Benton of Missouri, Vice President John C. Calhoun, and Supreme Court Justice Roger B. Taney. Boarding houses and hotels were also popular in the area during the 19th century. Commercial businesses, offices, and entertainment venues sprang up near Pennsylvania Avenue to serve residents and visitors, and a variety of churches were scattered throughout the area.

By the 1870s, Judiciary Square was being turned into a city park by the Army Corps of Engineers using the design principles of Andrew Jackson Downing. Buildings within the square, including a brick schoolhouse, a jail, and a hospital, were removed between 1873 and 1878. About the same time, the new Pension Building, designed by Montgomery Meigs, was constructed on the block north of F Street, between 4th and 5th Streets. Today, the Pension Building houses the National Building Museum. The structure is listed as a National Historic Landmark, on the National Register of Historic Places and in the DC Inventory of Historic Sites.

As the city continued to grow, more public buildings were required. In 1908, in response to the need for a new court building, Elliott Woods designed the District of Columbia Court of Appeals (now the U.S. Court of Appeals for the Armed Forces). In both its style and scale, the Court of Appeals corresponded to the Old DC Courthouse to its immediate southeast. The Court of Appeals building is listed in the National Register and the DC Inventory of Historic Sites.

The 1930s witnessed the replacement of Judiciary Square parkland with new judicial and municipal buildings. These include the Juvenile Court Building (Superior Court Building C), the Police Court (Superior Court Building A), and the Municipal Court (Superior Court Building B). Commercial and residential buildings were razed on the block between Indiana Avenue and C Street, and in 1939 construction was begun on the Municipal Center.

In the second half of the twentieth century, final development occurred on the Judiciary Square area. The Moultrie Courthouse was constructed west of the Municipal Center between 1975 and 1976. In 1985, the National Law Enforcement Memorial was built in the area between Buildings A and B. Defining the outer edges of the elliptical memorial are 300-foot long marble walls on which have been inscribed the names of more than 15,000 police officers killed in the line of duty.

Judiciary Square and its surrounding area contain numerous historic buildings and sites. The Old DC Courthouse, the Pension Building, and the US Court of Military Appeals Building have previously been discussed. Additional historic sites include the Central National Bank, at 633

Pennsylvania Avenue, the National Bank of Washington, at 630 Indiana Avenue, the General George C. Meade Memorial, at 3rd Street and Pennsylvania Avenue, the General Albert Pike Memorial, at 3rd and D Streets, and the Dr. Benjamin Stephenson Grand Army of the Republic Memorial, at 7th Street and Pennsylvania Avenue.

In addition to individually listed sites, the Judiciary Square area is included in three National Register Districts. The first of these, the Pennsylvania Avenue National Historic Site, was listed in the National Register in 1966 and listed in the DC Inventory of Historic Sites in 1973. Overall, the entire site encompasses about 100 acres, including the entire Judiciary Square Master Plan area.

Two blocks to the west of Judiciary Square, the Downtown National Historic District includes structures fronting on 7th Street (between Pennsylvania Avenue and I Streets), F Street (between 7th and 11th Streets), and H and I Streets (between 5th and 7th Streets). See Figure 3-3. Listed in the DC Inventory of Historic Sites and the National Register in 1984, the district contains a rich variety of commercial buildings, office buildings, synagogues and churches, remnants of downtown residential neighborhoods, and portions of Chinatown (DC Inventory of Historic Sites, 1997).

Judiciary Square itself was included in the National Register of Historic Places nomination for L'Enfant's City Plan in 1997. In addition, the Plan was preliminarily listed in the DC Inventory of Historic Sites in 1964. The nomination identifies historic streets, reservations and appropriations, and historic vistas.

3.2.3 Visual Resources

This section documents the existing visual character of Judiciary Square and the surrounding area. The study area for visual resources was determined by estimating the visibility of the proposed changes to viewers from various public places, with special consideration being given to L'Enfant's historic vistas. For this analysis, it was determined that beyond about 1/4 mile, there would be little chance of substantial visual effect from the proposed Master Plan. Accordingly, the study area for visual resources was generally defined as within one-quarter mile of Judiciary Square.

Visual Characteristics of the Site

The twenty-nine acre Master Plan area is developed with a series of three to six-story monumental civic buildings symmetrically placed in an urban landscape. Grassy areas, street trees, memorial fountains and sidewalks are located in Judiciary Square (see Figure 3-4). Surface parking is also provided adjacent to most of the buildings (see Figure 3-5). At the northern end of the site, between E and F Streets, and between Buildings A and B, is the Law Enforcement Officers Memorial. The Memorial is defined by a central plaza framed by lawn, a double row of trees, and a free-form curvilinear wall on both sides forming an ellipse. The openness of the Memorial, together with its axial north-south orientation, allows for a strong visual relationship between two of the historic buildings on the site, the Pension Building north of the Memorial and the Old DC Courthouse south of it.

The visual focus of the central block, between E Street and Indiana Avenue, is the Old DC Courthouse. The monumental three-story Greek Revival building, with its pedimented Ionic portico, faces south, towards Indiana Avenue. Two parks flank the Old DC Courthouse on the east and west sides. The more modern and larger massed Moultrie Courthouse and Municipal Center face north towards the Old DC Courthouse. Between the Moultrie Courthouse and the Municipal Center, John Marshall Park visually connects the Old DC Courthouse to the Pennsylvania Avenue and 4th Street NW running south (see Figure 3-6). This is the remnants of a vista planned by L'Enfant to connect Judiciary Square to the mouth of the Anacostia River.



Figure 3-4:
Memorial Fountains, Sidewalks and Grassy Areas within the Square



Figure 3-5:
North Facade of Old DC Courthouse with Surface Parking



Figure 3-6:
View Looking North Along Fourth Street

Urban Context

The Judiciary Square site is set within the grid of L'Enfant planned streets. Vistas along C Street, E Street, F Street, G Street, 4th Street (formerly 4-1/2 Street) and Indiana Avenue are listed as contributing resources in the National Historic Landmark documentation for L'Enfant's Plan. These vistas provide important views of the historic buildings and landscaping within the square (Figure 3-7).

On the east and west sides of the Square, modern buildings have been constructed. The taller buildings establish a strong edge around the Square, defining it visually. Beyond the initial edge of taller buildings there is a greater variety of building types and sizes.

To the south of the Square, on either side of Pennsylvania Avenue, the buildings are massive, some defining whole urban blocks. These buildings include the Prettyman Courthouse, the Canadian Embassy, and the East and West Wings of the National Gallery of Art. The Newseum is to be constructed on the vacant parcel adjacent to the Canadian Embassy. The north side of the Square is defined by the historic Pension Building (now the National Building Museum). Beyond the Pension Building on the north, there is a mixture of lower scale commercial and residential buildings, as well as the GAO Building.



Figure 3-7
View Looking Northeast Along Indiana Avenue

3.3 Transportation

The transportation system within the Master Plan area consists of roadways, parking areas, public transportation systems, walkways, and bikeways which provide access and circulation to the adjacent land uses. The study area consists of governmental and institutional facilities that generate employee- and visitor-related vehicular and pedestrian traffic during weekday peak and off-peak periods. Approximately 18,310 employees and an average of 14,140 visitors per weekday access the larger study area using the transportation system. Of these, there are approximately 2,420 employees and 2,700 visitors in the Master Plan area on weekdays. This EA examines the operational adequacy and efficiency of the transportation system within the study area and assesses whether it could be impacted by changes in the Master Plan area.

3.3.1 Roadway Traffic

The Judiciary Square study area is located in Northwest Washington, DC near the historic downtown area. The area is traversed by a grid roadway network that connects with regional arterials and freeways. Roadways within the study area are the north-south 4th and 5th Streets; the east-west C, D, E, and F Streets; and the diagonal Indiana Avenue, extending southwest off of D Street. Regional access is provided by the Interstate 395 (I-395) to the east; Pennsylvania and Constitution Avenues, to the south; 7th Streets, to the west; and E Street through the northern portion of the Square (See Figure 3-8).

Existing Traffic Volumes

The District classifies 7th Street, and Pennsylvania and Constitution Avenues, as principal arterials; 6th and E Streets, as minor arterials; and the other streets in the study area as collectors. The year 2000 Average Daily Traffic (ADT) volumes for these roadways are shown in Table 3-1. The ADT volumes match the corresponding roadway classifications, except for 3rd Street, which serves ADT volumes typical of a minor arterial. Approximately 56,000 vehicles per day enter the study area; 37,000 of which are specific to the area, and 19,000 of which are passing through the study area.

Overall, the roadway network operates efficiently and with excess capacity. However, traffic flow is constrained in the area by on-street parking and the slow movement and stopping of taxis, buses, service vehicles, police and court vehicles, and visitors looking for parking. In addition, major pedestrian-vehicular conflicts occur at and between several intersections. Traffic patterns in the study area during peak hours are further influenced by key access points, the locations of available parking, and conflicts with pedestrians leaving/approaching the Metro Stations.

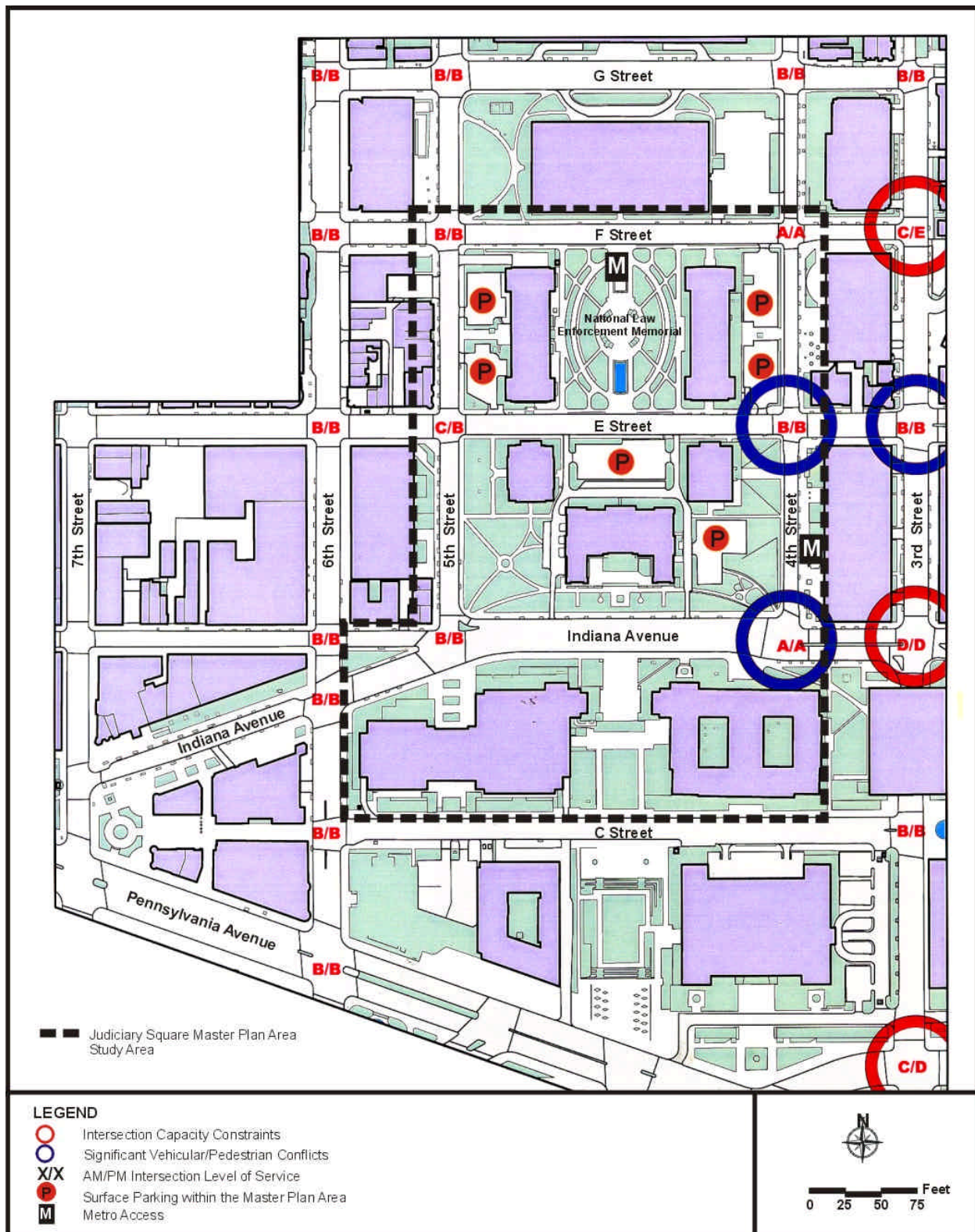


Figure 3-8: Existing Traffic Conditions

Table 3-1
Year 2000 ADT Volumes for Project Roadways

Study Area Roadways	2000 ADT Volumes
<i>Principal Arterials</i>	
Pennsylvania Avenue, NW	60,000
<i>Minor Arterials</i>	
6 th Street, NW	15,500
E Street, NW	10,000
<i>Collectors</i>	
C Street, NW	4,000
D Street, NW	7,000
F Street, NW	3,000
G Street, NW	6,000
3 rd Street, NW	10,000

Source: O.R. George & Associates

Existing Level of Service

The study area includes 21 intersections that were studied for access and circulation. The intersection traffic control devices and directional traffic flow movements are shown on Figure 3-8. Peak AM and PM weekday traffic flow conditions on these streets and intersections were observed through field investigations conducted as part of the Master Plan preparation. The peak hour traffic volumes were analyzed using the Highway Capacity Manual (HCM) procedures, in accordance with the District of Columbia Department of Transportation (DDOT) requirements.

The analysis results are presented in terms of the level of service (LOS) based on the average delay per vehicle at the intersections. LOS categorizes the quality of operational conditions within a roadway segment or intersection from A to F (best to worst). LOS D is the minimum acceptable LOS standard for planning and design purposes in the District. The study area intersections currently operate at an acceptable LOS, except for the 3rd and F Streets intersection that operates at LOS E during the PM peak hour. The intersections of 3rd and D Streets and 3rd Street and Constitution Avenue are operating at LOS D (approaching capacity) during at least one of the AM/ PM peak hours.

Baseline 2015 Year Traffic Volumes and LOS

A traffic study prepared as part of the Master Plan established 2015 as the baseline year to determine traffic conditions prior to implementation of the Master Plan. Based on DDOT recommendations, existing traffic volumes are anticipated to grow annually at two percent for major commuter corridors and one percent for other roadways. The projected year 2015 traffic volumes were analyzed for LOS, and the intersections are predicted to operate at acceptable

LOS, except for: 3rd and E Streets; 3rd and F Streets; 3rd and D Streets; and 3rd Street and Constitution Avenue, during at least one peak hour.

These are theoretical results based on traffic growth assumptions. However, for planning purposes, the transportation study projects that the following improvements may be necessary by year 2015:

- Signal optimization and/or geometric improvements at the 3rd and D Street, and E Street and Constitution Avenue, intersections; and
- Provision of a traffic signal at the 3rd and F Street intersection, based on the results of a signal warrant study.

The baseline traffic volumes projected for the year 2015 incorporate potential traffic that could be generated from proposed developments in the area, including the National Law Enforcement Museum and the Newseum.

3.3.2 Parking Availability and Proximity

There are 15 public and restricted underground parking garages, nine public and restricted surface parking lots, and on-street public and restricted parking along almost all of the streets in the study area. Within the study area, there are 6,085 off-street parking spaces and 965 on-street parking spaces, totaling 7,050 spaces. In the Master Plan area, there are two restricted underground parking garages and eight restricted surface parking lots totaling 886 restricted spaces. In addition, there are restricted and public parking on the street totaling 486 spaces.

Approximately 37,000 vehicles per weekday visit the study area. The parking facilities are operating at capacity and have a critical shortage for public use during weekdays. This results in illegal parking along C Street (between 3rd and 6th Streets); D Streets (between 4th and 5th Streets); 4th Street (between D and F Streets); and 3rd Street (between E and F Street). The illegal parking results in inefficient vehicular circulation on roadways along these segments and in the study area. As a result, motorists searching for parking circle the blocks repeatedly. This adversely impacts the roadway and intersection LOS.

3.3.3 Public Transportation

The study area is served by the Washington Metropolitan Area Transportation Authority's (WMATA) Metrorail at three stations: Judiciary Square, the Archives-Navy Memorial, and Gallery Place-Chinatown. The Judiciary Square Metrorail Station is located on E Street, between 4th and 5th Streets, and at 4th and D Streets. During an average weekday, 9,400 passengers board Metrorail's Red Line. The Archives-Navy Memorial Station is located at Pennsylvania Avenue and 7th Street, where on an average weekday, 7,810 passengers board Metrorail's Yellow and Green Lines. The Gallery Place-Chinatown Station is located at the intersection of 7th and G Streets, where on an average weekday, 10,600 passengers board Metrorail's Yellow, Green and Red Lines. Approximately 30,000 pedestrians enter or exit these stations per day; 9,000 of these enter or exit the Judiciary Square Station.

In addition, WMATA also provides Metrobus service along E Street, Pennsylvania Avenue, and 7th Street, with stops on each city block.

3.3.4 Pedestrian/Bicycle Circulation

The uses within the study area attract approximately 18,310 employees and 14,410 visitors per weekday. The pedestrian activity within the area is primarily generated from the Metrorail Stations and parking areas to the adjacent land uses. Pedestrian access is provided via sidewalks along all roadways, and diagonal paths within the Square. A large portion of the pedestrian movement is between the Judiciary Square Metrorail Station and the City Municipal Center. This movement conflicts with vehicular traffic primarily at 4th and D Streets, and also at 4th and E Streets, and 3rd and E Streets. All study area intersections have pedestrian crosswalks, and pedestrian signals are provided at signalized intersections.

Even with a high volume of pedestrians, the study area has an undefined public open space and is a somewhat inactive “non-green” square. The open space is primarily used as means of access between the buildings and the Metro Stations and parking lots. Pedestrian circulation is impeded by narrow sidewalks, interrupted flow due to surface parking lots, and limited compliance with the Americans With Disabilities Act (ADA).

There are no identified bicycle circulation patterns within the study area, although the Washington Area Bicycle Association identifies a designated regional bicycle route along E Street.

3.4 Physical/Biological Resources

3.4.1 Air Quality

Air quality is based on local and/or regional air pollutant sources and climate conditions. Pollutants generated locally and regionally can be affected seasonally by wind, temperature, and humidity. The existing air pollutant sources in the study area are vehicle traffic emissions, and emissions from buildings that burn natural gas for heating.

In response to the Clean Air Act (CAA) of 1970 and the CAA Amendments of 1977 and 1990, the US Environmental Protection Agency (EPA) has established National Ambient Air Quality Standards (NAAQS) for the protection of human health and welfare. Current NAAQS are set for the criteria pollutants of carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), lead (Pb), particulate matter equal to or less than 10 microns in size (PM₁₀), and fine particulate matter (PM_{2.5}). The EPA assesses the status of compliance with NAAQS for geographic regions specified throughout the United States. Regions that do not meet the NAAQS for a criteria pollutant are designated as “nonattainment areas” for that pollutant.

The Judiciary Square study area is located within the National Capital Interstate Air Quality Control Region (NCIAQCR), which includes Washington, DC. The region currently meets NAAQS for all criteria pollutants except ozone, which exceeds NAAQS at elevated levels (USEPA 2003). The EPA has designated the region as a “serious non-attainment area” for ozone. To ensure that federal actions conform with attainment plans, any federal agency responsible for an action in a nonattainment area, is required to determine that the action is either exempt from conformity determination or it conforms to the applicable attainment plan.

Construction emissions from equipment and vehicles, and post-construction emissions from project-related vehicles and buildings due to federal actions are subject to conformity determination. However, these actions are exempt if the total of all reasonably foreseeable direct and indirect annual emissions for the non-attainment pollutant are: (1) less than the emission rate thresholds, known as *de minimus* limits, and (2) less than ten percent of the area’s annual emission budget for the non-attainment pollutant.

3.4.2 Noise Levels

Introduction and Terminology

Noise levels are usually measured and expressed in decibels (dB) that are perceivable by the human ear, commonly known as an A-weighted sound level (dBA). Decibels are measured on a logarithmic scale. Thus, a doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by only 3 dBA. Average noise levels over a period of time are usually expressed as dBA L_{eq}, or the equivalent noise level for that period of time.

There is no simple correlation between human perception of noise levels and acoustical energy. It is widely accepted that the average healthy human ear can barely perceive noise-level changes of less than 3 dBA, but a 5 dBA change is readily perceptible. Noise levels are attenuated by the

distance and/or a barrier between the source and receptor, where the barrier is adjacent to either the source or receptor.

Regulatory Framework

The District of Columbia noise regulations establish maximum permissible sound levels for any sound that emanates from an operation, activity, or noise source at the property line of the site on which the noise source is located. From 7:00 p.m. to 7:00 a.m., maximum noise levels of 55, 60, and 65 dBA apply for residential, commercial, and industrial zoned areas, respectively, with no averaging time period specified. For construction noise, DC Municipal Regulations require that from 7:00 a.m. to 7:00 p.m. on any weekday, construction and demolition noise levels (excluding pile drivers) shall not exceed 80 dBA L_{eq} unless granted a variance. Noise compliance measurements shall be made 25 feet from the outermost limits of the construction site. No permit for construction or demolition shall be issued until the permit applicant provides written documentation that construction noise will comply with District noise regulations.

Sensitive Noise Receptors

Sensitive noise receptors are generally considered to be human activities or land uses that may be subject to the stress of significant interference from noise. Land uses associated with sensitive receptors include residential dwellings, hotels, hospitals, nursing homes, education facilities, and libraries. Sensitive receptors may also include threatened or endangered noise-sensitive biological species. Commercial (office buildings) and industrial land uses are not considered “noise sensitive” by most definitions.

There are sensitive noise receptors currently located within the study area, however, none exist within the Master Plan area. Existing residences are located at C and 6th Streets, and residences are proposed on D and E Streets at 7th Street. Other potential sensitive noise receptors in and outside the study area would be residences along potential construction haul routes.

3.4.3 Natural Resources

Water Resources

The study area is located in the Potomac River basin, a sub-basin of the Chesapeake Bay Watershed. All of the uncollected surface runoff from the sub-basin drains towards the Potomac River, either directly or via the Rock Creek and Anacostia Rivers. There are no permanent bodies of water located on or near the study area, nor are there any wetlands in proximity to the study area. Historic maps of Downtown Washington, DC identify that a small stream once traversed the northeast corner of the DC Courthouse block. Surface water temporarily exists as stormwater, which infiltrates into areas not covered by impervious surfaces or drains down slope to the southwest. The study area is not located within the 100-year floodplain of the Potomac or Anacostia Rivers.

Regionally, the groundwater aquifer system is composed of unconsolidated Coastal Plain sediments and groundwater flows through it to the southwest. Groundwater migration maybe

locally altered by proximity to underground Metrorail structures. Subsurface investigations have been performed in the study area, and depth to groundwater is approximated at 30 feet (Schnabel Engineering Associates 2002). Potential groundwater recharge occurs from stormwater infiltration in areas uncovered by impervious surfaces.

Soils and Topography

The study area is located within the geological province of the Atlantic Coastal Plain Region, where natural sedimentary materials of sands, clays, and silts overly crystalline bedrock. The site is located on a geologic terrace above the Potomac River floodplain. The soils of the Master Plan area are classified as Urban Land Association, which are soils that have been previously disturbed, cut or filled and may be covered by impervious surfaces. Recent soil borings indicate fill was placed within the study area during previous site grading (Schnabel Engineering Associates 2002). The environmental testing at the site for Garage #1 revealed soils contaminated with trace levels of arsenic and other metals, and petroleum hydrocarbons below EPA risk-based concentrations.

The topography of the Master Plan area is variable. Overall, the area gently slopes to the south from F to C Streets. The high point of the study area is approximately 48 feet at 5th and E Streets, and the low point is approximately 13 feet at 6th and C Streets. The greatest immediate change is from 44 to 13 feet from D to C Streets at 6th Street.

Vegetation and Wildlife Habitat

The Master Plan area is located in an urban environment that has previously been disturbed, used, and restored as a grassed, landscaped area. Therefore, the area does not provide a natural environment for terrestrial or aquatic animal species. The wildlife community within the Master Plan area likely includes common urban species such as small mammals and birds including gray squirrels (*Sciurus carolinensis*), Norway rats (*Rattus norvegicus*), pigeons (*Columbia livia*), house sparrows (*Passer domesticus*), and starlings (*Sturnus vulgaris*). Based on the existing condition of the area, it is unlikely that any endangered or threatened species or critical habitat would exist on-site. The existing vegetation within the Master Plan area consists of older street trees and newly planted street trees. There is a variety of mostly shade and a few flowering trees within the city blocks, lined predominantly along D, C, and 5th Streets.

3.4.4 Hazardous Materials

Based on the age, the existing buildings to be renovated may contain outdated, now hazardous building materials such as lead-based paint, fluorescent lighting containing polychlorinated biphenyl (PCBs), and asbestos-containing materials. If disturbed, these materials are potential health hazards through ingestion, absorption, or inhalation of airborne particles or dust from these hazardous materials.

Since soil borings in the area indicate the placement of fill from previous site grading and development, there is a possibility that contaminated soils may be encountered below ground. Soil contamination is a concern were soils are exposed to human activities from grading or

excavation, and are used as surface fill on-site or disposed at a landfill. Typical contamination maybe natural such as trace amounts of arsenic, copper, chromium, or zinc, for which the Environmental Protection Agency has established risk-based concentrations for residential, commercial, and industrial uses. Fill material may contain manmade contaminants such as volatile organic compounds from hydrocarbon-containing products (fuels, oils, solvents, etc.).

3.5 Utilities/Infrastructure

3.5.1 Stormwater Systems

The natural stormwater drainage patterns of the study area have been altered as a result of urbanization. Within the 29 acres of the Master Plan area, there are approximately 5 acres of building footprint, 6 acres of city streets, and 18 acres of both paved and unpaved space interspersed between buildings. Of these 18 acres, there are impervious surfaces which include 1.73 acres of paved parking lots. Stormwater runoff from saturated soils and impervious surfaces drains by surface sheet flow generally to the southwest to inlets accessing the municipal stormwater collection system at the street curbs and in open lots.

Collected stormwater from the study area is combined with wastewater in the District's combined sewer system for transport to the Blue Plains Wastewater Treatment Plant (WWTP) for treatment prior to discharge to the Potomac River. Under extreme stormwater events, such as a 15-year rainfall event, some portion of the District's system may reach peak capacity and the District releases the excess combined stormwater and wastewater flow directly to the river as a combined sewer overflow (CSO).

3.5.2 Water Supply

The District of Columbia Water and Sewer Authority (DC-WASA) provides water supply to the District. The source of water supply is the Potomac River via the Dalecarlia and McMillan Water Reservoirs and Water Treatment Plants. Pump stations within the distribution system deliver water through main and lateral pipelines.

3.5.3 Wastewater Systems

The DC-WASA provides wastewater management in the District that includes collection, treatment, and discharge of effluent. Wastewater collected from the study area is transported in the District's combined sewage system for treatment at the Blue Plains WWTP with subsequent discharge of treated effluent to the Potomac River.

3.5.4 Energy Systems

The Potomac Electric Power Company (PEPCO) provides electricity to the District. Buildings in the study area are heated by natural gas and steam. Washington Gas Light Company (WGL) supplies natural gas to the District.

3.5.5 Solid Waste Systems

Facilities in the study area generate non-hazardous solid waste. Private waste collection contractors are contracted to collect and transport the solid waste for disposal in a landfill. Several landfills are located outside the District for disposal of solid waste.



CHAPTER 4: ENVIRONMENTAL CONSEQUENCES

4.0 ENVIRONMENTAL CONSEQUENCES

This chapter includes an assessment of potential direct and indirect impacts of the Judiciary Square Master Plan on the Master Plan area, as well as cumulative impacts from other projects in the study area. The assessment is based on available information, site reconnaissance, and resource analysis.

4.1 Socio-Economic Resources

4.1.1 Land Use

Master Plan Alternative

With implementation of the Master Plan, the DC Courts would renovate Moultrie Courthouse and add 92,500 sf of space to accommodate security screening facilities and a new entrance for DC Family Court. The Old DC Courthouse would also be renovated and 37,400 sf of space would be added to the north side of the building. Buildings A, B, and C would be renovated, and surface parking lots would be replaced at Buildings A, B, and D with new below-grade facilities to the west of Building B and to the east and west of the Old DC Courthouse. Finally, public open spaces would be defined, historic vistas would be enhanced, and the pedestrian circulation system would be improved.

The Master Plan projects would be consistent with the established land uses on the site and in the immediate area. There would be positive impacts as a result of the Master Plan, since the Old DC Courthouse would no longer be vacant and the surrounding buildings would be renovated for judicial uses. Positive impacts would also occur as a result of the removal of surface parking and the restoration of landscapes in these areas.

The Master Plan could have indirect positive impacts on land use in the study area since the renovation and restoration of Judiciary Square could enhance revitalization in surrounding neighborhoods, particularly north and west of the site. Short-term minor adverse impacts are also likely due to increases in local traffic, noise, and air emissions during renovation and construction of various facilities.

Cumulative Impacts: There could be a minor adverse cumulative impacts to land use. Judiciary Square currently consists of civic buildings separated by landscaped/hardscaped buffers. However, the construction of the National Law Enforcement Museum (NLEM), when coupled with the addition to the north elevation of the Old DC Courthouse, could crowd the space between the Courthouse building, Building C, the US Court of Appeals, and E Street.

Mitigation

To reduce potential crowding and to create the maximum amount of open space between the Old DC Courthouse and the National Building Museum:

- Reduce the size and mass of the NLEM entry portals and coordinate the design with the new addition to the Old DC Courthouse.

No Action Alternative

Under the No Action Alternative, the Judiciary Square Master Plan would not be implemented. Thus, there would be no positive impacts to land use as a result of the No Action Alternative. The Square would continue to function as a judicial center with court buildings located among surface parking lots and small open areas.

4.1.2 Planning Policies

Master Plan Alternative

Implementation of the Master Plan would comply with the *Federal Elements* of the Comprehensive Plan because it would preserve and enhance parks within L'Enfant's Judiciary Square. In addition, the landscaped green spaces around several historic buildings would be maintained, historic features would be enhanced, and surface parking would be replaced with underground structures.

The Master Plan would comply with the *District Elements* because it would restore and maintain public service facilities, and it would improve security at these facilities. In addition, monuments, sculptures, and fountains would be maintained within the Square and green spaces would be enhanced.

The Master Plan Alternative would not be entirely consistent with local zoning, as a portion of the garage space would be dedicated to all day commuter parking. However, these spaces would not represent new parking on the Square, but would replace existing surface parking with more secure, underground spaces. In addition, the Master Plan recommends revisions to the SP-2 zoning restrictions on outdoor or sidewalk retail uses on adjacent streets.

Mitigation

No mitigation would be necessary.

No Action Alternative

Under the No Action Alternative, the Judiciary Square Master Plan would not be implemented. Thus, there would be no impacts to planning policies as a result of the No Action Alternative.

4.1.3 Community Facilities

Master Plan Alternative

The Master Plan would result in positive impacts to cultural and religious facilities, because the landscapes and walkways surrounding the various statues and memorials in the area would be improved. In addition, implementation of the Master Plan would enhance existing open spaces, create new urban parks, and increase and improve pedestrian connections. There would be no impacts to public safety facilities or educational facilities as a result of the Master Plan.

Mitigation

No mitigation would be necessary.

No Action Alternative

Under the No Action Alternative, the Judiciary Square Master Plan would not be implemented. Thus, there would be no impacts to community facilities as a result of the No Action Alternative.

4.1.4 Demographics/Environmental Justice

Master Plan Alternative

Implementation of the Master Plan would not increase the residential population or directly affect demographics in the Judiciary Square area. There would be indirect positive impacts to surrounding neighborhoods due to open space and pedestrian circulation improvements within the Master Plan area. There could also be minor short-term construction-related impacts due to renovation and construction activities.

There would be no disproportionately high and adverse human health or environmental effects on minority or low-income populations as a result of the Master Plan.

Mitigation

To address potential impacts to nearby residential areas during renovation and construction:

- Restrict truck traffic to major, non-residential thoroughfares when entering and leaving the Master Plan area.

No Action Alternative

Under the No Action Alternative, the Judiciary Square Master Plan would not be implemented. Thus, there would be no impacts to demographics/environmental justice as a result of the No Action Alternative.

4.1.5 Economic/Fiscal Resources

Master Plan Alternative

With the implementation of the Master Plan, there would be an estimated increase in employment of 60 persons at Judiciary Square over current levels. This minor increase would have a negligible positive impact on local retail spending.

No property tax would be generated from the proposed renovation and construction of facilities at Judiciary Square, as the buildings and land are all owned by the DC or federal governments. However, there could be a minor, long-term positive impact to the local economy due to the potential contribution the Master Plan improvements would make to the overall revitalization of the area.

Mitigation

No mitigation would be necessary.

No Action Alternative

Under the No Action Alternative, the Judiciary Square Master Plan would not be implemented. Thus, there would be no impacts to economic/fiscal resources as a result of the No Action Alternative.

4.2 Cultural Resources

Standards for evaluating potential effects on historic resources are derived from the National Historic Preservation Act of 1966, as amended. These regulations define “effect” as “alteration to the characteristics of a historic property qualifying it for inclusion in or eligibility for the National Register” (36 CFR 800.16). Further, an “adverse effect” occurs “when an undertaking may alter, directly or indirectly, any of the characteristics of the historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association” (36 CFR 800.5). Federal regulations also require that special attention be given to the effects of an undertaking on a National Historic Landmark (36 CFR 800.10).

Potential effects to archaeological and historic resources include direct and indirect effects. The physical displacement, demolition, or alteration of a resource is a direct effect; changes in the use, operation or character of a resource may be either direct or indirect effects; and changes to the visual context are considered indirect effects. ‘Impacts’ as defined in the CEQ regulations, and ‘effects’ as used in NHPA are synonymous.

4.2.1 Archaeological Resources

Master Plan Alternative

Based on the findings of the 1979 reconnaissance survey by the Pennsylvania Avenue Development Corporation, there is a slight potential for prehistoric archaeological remains within the Master Plan area. There is also limited potential for historic archaeological remains due to prior known uses on the site. Any extant archaeological resources could potentially be disturbed during implementation of the Judiciary Square Master Plan.

Mitigation

To preserve potential archaeological resources and ensure compliance with Section 106, DC Courts and the DC SHPO should:

- Determine whether subsurface archaeological testing is required prior to ground-disturbing construction activities.

No Action Alternative

Under the No Action Alternative, the Judiciary Square Master Plan would not be implemented. Thus, there would be no effects to archaeological resources as a result of the No Action Alternative.

4.2.2 Historic Resources

Master Plan Alternative

With implementation of the Master Plan, the removal of surface parking and its replacement with green space would have a positive effect on the historic character of the Square. It would also improve the setting of the historic buildings on the site. While relocating the existing parking to underground facilities would have positive effects on the setting of these historic buildings, the excavation for the garages and their underpinnings could potentially adversely affect their structural integrity.

The renovation and reuse of the Old DC Courthouse and modernization of Buildings A, B and C would have positive effects on historic resources at the Square, since a currently vacant historic structure would be reused for its intended function and others would be improved. However, the addition of a secure entrance on the north elevation of the Old DC Courthouse could adversely affect the historic building's structure and fabric, and the construction of the plinth wall for security purposes could alter the setting of the Courthouse and to the east and west.

The Master Plan also recommends narrowing Indiana Avenue (D Street) on its north side, and both sides of E Street, thereby adding to the space in the block occupied by the National Law Enforcement Officers Memorial, the Old DC Courthouse and Buildings A, B and C. The Plan also recommends narrowing Indiana Avenue between 4th Street and 5th Street. Both Indiana Avenue and E Street are historic resources listed in the National Register documentation for the Plan of the City of Washington. Although the exact dimensions of the historic cartways could not be determined, the roadway widths would be reduced to be more consistent with widths on adjacent blocks.

There is also the potential for minor indirect adverse effects as a result of the placement of exterior service areas north of Buildings A and B. NCPC and the DC SHPO have requested that placing the service area near Building B within the garage be investigated. The Master Plan also proposes to locate a large service area east of the Old DC Courthouse. There is the potential that the service area will be visible in views of the east elevation of the Old DC Courthouse and the south elevation of Building C. However, these views currently include the surface parking lot to the east of the Old DC Courthouse. Also, construction of the proposed garages would temporarily impact existing monuments including the Joseph James Darlington Memorial Fountain. These would be temporarily removed during excavation and then reestablished once the underground structures are completed.

Cumulative Effects: There could be cumulative effects resulting from the implementation of the Master Plan together with other planned projects in the immediate area. The construction of the National Law Enforcement Museum north of the Old DC Courthouse could potentially disrupt the visual relationship between the historic buildings on the Square and the Pension Building (National Building Museum). In addition, the Newseum has proposed a visitor drop-off area on C Street. This location could obstruct views of the Dr. Benjamin Stephenson Grand Army of the Republic Memorial, which terminates the C Street vista at Indiana Plaza.

Mitigation

The DC Courts and NCPC intend to fulfill their responsibilities under Section 106 of the National Historic Preservation Act (NHPA) and its regulations. Consultation has been initiated with the District of Columbia Historic Preservation Office. Implementation of the Master Plan would adhere to the conditions of the Memorandum of Agreement to be prepared through the Section 106 process. Further, to minimize the above-mentioned adverse effects on historic resources that could result from the implementation of the Judiciary Square Master Plan, the following mitigation measures should be employed:

- Complete a structural analysis to ensure that the construction of the underground garages will not compromise the structural integrity of the adjacent historic buildings.
- Construct the secured entrance on the north elevation of the Old DC Courthouse in compliance with the Secretary of the Interior's Standards to ensure its architectural and visual compatibility with the existing historic resources.
- Walkways, appurtenances, plinth walls, and other security elements should be compatible with the historic designs and materials of the surrounding buildings, and should be shielded from view as much as possible.
- Consider relocating the entrance to the northernmost parking garage from F Street to 4th Street to reduce potential impacts to the Pension Building.
- Consider placing the service area for Building B within the adjacent underground garage.
- Ensure that the tree spacing along the east and west sides of the Square does not disrupt views of the historic buildings.
- Minimize the size and mass of the entrance pavilions to the National Law Enforcement Museum and locate them as far apart as possible to preserve the visual relationship between the Old DC Courthouse, other historic buildings on the site, and the Pension Building (National Building Museum).
- Design the Newseum drop-off area on C Street to minimize its visual impact.

No Action Alternative

Under the No Action Alternative, the Judiciary Square Master Plan would not be implemented. Thus, there would be no effects to historic resources as a result of the No Action Alternative. The existing at-grade parking would remain, the Old DC Courthouse would continue to be vacant and therefore continue to deteriorate due from neglect, and the other historic buildings on the site would not be renovated.

4.2.3 Visual Resources

This visual impact assessment addresses potential changes to views and vistas that can be attributed to the Master Plan. Impacts to views and vistas are determined based on an analysis of the existing quality of the view, the sensitivity of the view (such as important views from historic and cultural sites), and the anticipated relationship of the proposed design elements to the existing visual environment.

Visual impacts in the analysis presented below are described in the following categories:

- **No visual impact** – The proposed alterations would not be visible.
- **Minor visual impact** – The proposed alterations would be visible, but would not interfere with views and would not change the character of existing views.
- **Moderate visual impact** – The proposed alterations would be visible and would interfere with existing views, but would not change the character of the existing views.
- **Major visual impact** – The proposed alterations would be visible as a contrasting or dominant element that interferes with views and substantially changes the character of the existing views.
- **Positive visual impact** – The proposed alterations would improve a view or the visual appearance of an area.

Master Plan Alternative

Over the short-term, the implementation of the Master Plan could result in moderate adverse impacts to views due to construction activities. However, the overall visual character of the site would exhibit long-term improvements. Surface parking would be removed adjacent to Buildings A, B, C, the Old DC Courthouse, and the US Court of Appeals, and replaced with landscaped open space. Sidewalks would be widened and decorative pavement would be installed on portions of Indiana Avenue and E Street. Streetscape improvements and guidelines would be implemented along 4th and 5th Streets at the edges of the site, and along the southern portion of Indiana Avenue. Historic buildings within Judiciary Square would be sensitively renovated, and the overall cultural setting for them would be improved.

Two historic vistas in the L'Enfant Plan would also potentially be positively impacted through the implementation of the Master Plan. The vista along Indiana Avenue between Judiciary Square and 7th Street would be improved through the removal of surface parking west of the Old DC Courthouse and its replacement with landscaped open space. The vista would further be enhanced by the unification of the streetscape along Indiana Avenue through the implementation of established guidelines. The vista between the southern entrance of the Old DC Courthouse and 4th Street to the south would also be improved, due to enhancements to John Marshall Park, and the preservation of the ceremonial entrance to the historic Old Courthouse Building.

There is, however, the potential for adverse impacts to the views of the Old DC Courthouse from other buildings within Judiciary Square and the Pension Building (National Building Museum) as a result of the addition to the north elevation of the Courthouse building. There are also potential minor adverse impacts resulting from the entrances to the three parking garages. Cars

would enter the first garage, potentially located west of the Old DC Courthouse, off of 5th Street. Thus, views from 5th Street of the Old DC Courthouse would include the new entrance structure. A ventilation shaft/stairwell would also be visible from 5th Street and from various points within the park. Similarly, the garage east of Building B would be entered off of F Street, and could potentially be visible from the grounds of the Pension Building (National Building Museum). The entrance to the final garage, planned for a site south of Building C, might impact views from 4th Street of the Old DC Courthouse. However, these views currently include the surface parking lot, which would be removed with the implementation of the Master Plan.

The new access ramps, appurtenances, security features, and landscaping features would not directly impact historic resources, however, there is the potential for these features to affect views of historic structures. In addition, the proposed planting of a double rows of trees along the east and west edges of the Square, as well as the addition of security features such as a new plinth wall and security fence along 4th and 5th Streets could block views of the Judiciary Square. The narrowing of E Street and the planting of trees between the roadway and the sidewalk could narrow the viewshed along E Street, restricting views of historic buildings and spaces, as well as truncating the E Street vista.

Cumulative Impacts: Views of the north elevation of the Old DC Courthouse could also be impacted as a result of the Master Plan and the proposed National Law Enforcement Museum. Views would be improved through the elimination of the surface parking between the Old DC Courthouse and E Street, creating a fully landscaped vista between the Old DC Courthouse and the Pension Building (National Building Museum). However, the entrance addition on the north elevation of the Old DC Courthouse, together with the construction of the entrance pavilions to the NLEM, could moderately impact views of the historic structure. In addition, there is the potential for crowding the space between the Old DC Courthouse and E Street, with the planned construction of the NLEM.

Mitigation

To reduce the potential adverse visual impacts resulting from implementation of the Judiciary Square Master Plan, the following mitigation measures should be employed:

- Construct entrances to garages with materials used in the surrounding historic structures, and shield them from view through the use of landscaping and other design elements.
- Design walkways, appurtenances, plinth walls, and other security elements to be compatible with the historic designs and materials of the surrounding buildings and to be shielded from view as much as possible.
- Consider relocating the entrance to Garage #2 from F Street to 4th Street to reduce potential impacts to views from the Pension Building (National Building Museum).
- Construct the secured entrance on the north elevation of the Old DC Courthouse in compliance with the Secretary of the Interior's Standards to ensure its architectural and visual compatibility with existing historic resources.
- Minimize the size and mass of the entrance pavilions to the National Law Enforcement Museum to reduce the potential for crowding, maximize the amount of open space, and preserve the view corridor between the Old DC Courthouse and the Pension Building

(National Building Museum). Do not extend the entrance pavilions beyond the E Street building line established by the US Court of Appeals and Building C. Locate the entrance pavilions as far apart as possible, but sufficient distance away from the US Court of Appeals and Building C. At a minimum, the pavilions should not extend beyond the respective east and west facades of the Old Courthouse Building.

- Consider placing the service area for Building B within the adjacent underground garage.
- Ensure that the tree spacing within the Square does not disrupt views of the historic buildings.

No Action Alternative

Under the No Action Alternative, the Judiciary Square Master Plan would not be implemented. Thus, there would be no impacts to visual resources as a result of the No Action Alternative. The existing surface parking areas would remain and the Square would not be improved.

4.3 Transportation

4.3.1 Roadway Traffic

Master Plan Alternative

Traffic impacts could potentially occur on roadways in proximity to Judiciary Square in Northwest Washington, DC due to construction and operation of the proposed facilities in the Master Plan. Impacts to traffic during construction are short-term in duration, while operational traffic impacts are long-term.

The proposed construction activities associated with the Master Plan would include building restoration and structural expansion of Moultrie Courthouse and the Old Courthouse Building; building restoration of Buildings A, B, and C; and construction of three below-grade parking garages. Building restoration and expansion, and garage construction would include the transport of workers, equipment, and materials to the sites, the transport of building renovation wastes and excavated soil from the sites, and movement of equipment and vehicles on adjacent roadways. These activities would generate additional vehicle movement on roadways in proximity to the proposed facilities and along haul routes, and therefore, may constrain traffic movement. The potential roadway segments to be affected are all within the Master Plan area and include segments of C, D, E, and F Streets and 4th, 5th, and 6th Streets. However, construction of the proposed facilities is not anticipated to occur at the same time or be of the same duration. Therefore, construction would result in minor short-term traffic impacts to roadways adjacent to construction.

Operation of the proposed facilities would increase building space by 134,200 square feet, increase employees by 60, and relocate and slightly increase employee parking. Instead of utilizing surface parking lots, employee traffic would utilize the proposed parking garages at 5th and D Streets (Garage #1), on 4th Street between E and F Streets (Garage #2), and on 4th Street between Indiana Avenue and D Street (Garage #3). In addition, the existing modal split conditions of 35-45 percent using alternative transportation is assumed to continue. Therefore, minimal changes in employee traffic volumes and patterns are anticipated, resulting in a minimal impact on design year 2015 roadway traffic.

Operation of the proposed facilities would relocate existing visitor services within Judiciary Square and no net increase in visitation is anticipated. As discussed in subsequent section 4.3.2, the initial reduction in on-street parking would result in visitors searching for parking, thereby disrupting circulation on area roadways. There would be a temporary minor impact anticipated to roadway traffic until Garage #3 is operational.

Other proposed Master Plan changes include the narrowing of E Street and Indiana Avenue between 4th and 5th Streets for aesthetic, security, and pedestrian safety reasons. Adjacent intersections on 4th and 5th Streets would continue to function within an acceptable LOS. In addition, the modified roadway would be designed to reduce pedestrian crossing times and vehicular-pedestrian conflicts.

The new garages would result in a marginal redistribution of vehicular trips, which would have no appreciable adverse impacts on area intersections and roadways in terms of traffic volumes. The relocation of parking from on-street spaces to off-street garages should have an overall minor positive effect. However, each garage entrance will require security vetting operations that may cause temporary queuing at the entranceways, and could affect localized traffic flow on adjacent roadways and pedestrian movement on adjacent sidewalks. However, capacity/operational and queuing analyses indicate there would be minimal back-ups and impacts on adjacent traffic movements. Development of Garage #1 is not projected to increase traffic volume beyond the capacity of the intersections adjacent to its entrance. Should roadways such as C Street be temporarily closed for special security situations, traffic disruptions would occur and could adversely impact circulation in the area.

Cumulative Impacts: Other construction and renovation projects proposed in the study area include construction of the National Law Enforcement Museum, the construction of the Newseum and the renovation and expansion of the E. Barrett Prettyman US Federal Court Building. These facilities are scheduled to be constructed regardless of the Master Plan and will add to the construction-related traffic in the area. Coordinated construction management would minimize construction-related traffic and roadway constraints during peak AM and PM traffic hours.

Operational traffic impacts would be generated by the additional employees and visitors to the NLEM, Newseum, and Prettyman Building. It is anticipated that the two museums would bring visitors during off-peak hours and a large number of visitors would access the area via public transit. Further, additional traffic generated from these facilities including the expansion of Prettyman Building, has been taken into consideration in the projection of the baseline year traffic volumes. As discussed before, the Master Plan alternative would add negligible traffic to the area and therefore, the cumulative impact due to the Master Plan on area transportation is anticipated to be minimal. Capacity deficiencies for three intersections either occur currently or will result from traffic growth not associated with the DC Courts system.

Mitigation

To minimize the potential adverse traffic impacts resulting from the implementation of the Judiciary Square Master Plan, or due to the baseline year projections, the following mitigation measures should be employed:

- Prepare a plan in accordance with DDOT to manage construction worker traffic and parking, construction material delivery and waste hauling, and activities that constrain traffic movements. The plan should be prepared by the general construction contractor for each project and should minimize equipment and vehicle movements on roadways during peak AM and PM weekday traffic periods.
- Implement signalization and geometric improvements at the intersections of 3rd Street at D Street, E Street, F Street, and Constitution Avenue to accommodate projected future/horizon year traffic volumes.

- Implement the proposed Transportation Management Plan (TMP) in the Master Plan which provides additional mitigation measures beyond those required by federal or NCPC guidelines, including announcements of street closings for security situations.

No Action Alternative

Under the No Action Alternative, the proposed facilities of the Judiciary Square Master Plan would not be constructed or renovated. Therefore, there would be no impacts to roadway traffic as a result of the No Action Alternative.

4.3.2 Parking Availability and Proximity

Master Plan Alternative

Implementation of the Master Plan would include removal of 464 off-street restricted parking spaces from existing surface lots west of Building A, east of Building B, south of Building C, west and north of Building D, and the loss of 32 on-street public parking spaces. However, the Master Plan would also result in the construction of three below-grade parking facilities with approximately 550 restricted and public spaces.

During the construction of the parking garages, it is possible that there may be a loss of existing parking in the short term. Specifically, when Garage #2 is constructed, surface parking may be lost adjacent to Building B during the period of construction. Similarly, on-street parking spaces may be lost during roadway improvements, including the narrowing of E Street. Therefore, the proposed Master Plan may have moderate impacts on parking in the area in the short-term.

Once construction is completed, restricted and public parking availability and proximity would change. The existing 464 restricted off-street surface parking spaces would be replaced by 550 spaces including 500 restricted spaces for employees and police in the three proposed below-grade parking garages. Garage #1 would provide 250 of the 500 reserved spaces that would be shared by employees of the US Court of Appeals and the DC Courts, Garage #2 would provide 150 spaces for employees of the DC Courts, and Garage #3 would provide 150 spaces, 100 of which would be shared by the Metropolitan Police Department and the DC Courts, and 50 of which would be available for visitors. Therefore, the implementation of the Master Plan would result in a net increase of 36 reserved spaces and 18 public spaces. The additional spaces would help to alleviate the illegal parking issue that currently exists in the area.

Cumulative Impacts: Implementation of the Master Plan is likely to have cumulative parking impacts when combined with the additional proposed facilities in the area. The cumulative demand for parking in the area will be further increased with construction of the NLEM, the Newseum, and the Prettyman Courthouse.

Mitigation

To avoid the potential adverse parking impacts resulting from the implementation of the Judiciary Square Master Plan, the following mitigation measures should be employed:

- Construct Garage #2 and Garage #3 prior to the demolition of the parking lots adjacent to Building B and Building C, and nearby on-street parking to minimize the loss of restricted parking due to construction.
- Design the proposed garage and service access points to minimize potential operational impacts to traffic on adjacent streets.

No Action Alternative

Under the No Action Alternative, the proposed facilities of the Judiciary Square Master Plan would not be constructed or renovated. Therefore, parking in the area would continue to be insufficient and would continue to impact traffic circulation as a result of the No Action Alternative.

4.3.3 Public Transportation

Master Plan Alternative

Implementation of the Master Plan would not directly increase ridership on the Metrorail and bus system due to a minimal increase in employees and visitors. Therefore, no direct impacts are anticipated.

Cumulative Impacts: The proposed NLEM and Newseum developments are anticipated to bring large numbers of visitors to the area via public transit. However, implementation of the Master Plan will have minimal impact on these volumes when added to these other projects. The Master Plan would benefit these facilities by improving the pedestrian environment and reducing potential conflicts with vehicles in the area.

Mitigation

No mitigation would be necessary.

No Action Alternative

Under the No Action Alternative, the proposed facilities of the Judiciary Square Master Plan would not be constructed or renovated. Therefore, there would be no impacts to public transportation as a result of the No Action Alternative.

4.3.4 Pedestrian/Bicycle Circulation

Master Plan Alternative

Implementation of the Master Plan is expected to have major positive impacts on pedestrian circulation. The proposed plan recommends improving pedestrian circulation by enhancing the existing pedestrian paths between the various blocks within Judiciary Square and creating new paths with the removal of parking lots. In addition, landscaped areas would be reintroduced and defined as public open space through the use of widened sidewalks, tree planting, decorative pavement, primary pedestrian access to buildings, and ADA accessible entrances to buildings. Proposed security measures of hardened streetscape elements, plinth walls, and bollards would be designed to promote pedestrian movement throughout Judiciary Square.

The Master Plan would have minor positive impacts on bicycle circulation. The designated regional bike route on E Street would be aesthetically improved through the Square with the proposed narrowing of E Street. There would be no change to the existing bicycle circulation within the Master Plan area.

Cumulative Impacts: Implementation of the Master Plan is expected to have positive cumulative impacts on pedestrian/bicycle circulation when combined with the additional facilities proposed for the area. There would be an increase in the pedestrian traffic due to the implementation of these projects. However, the Master Plan would improve the pedestrian environment of the area. In addition, the pedestrian traffic generated by the other projects would occur primarily during non-peak hours and is not likely to have a major impact on pedestrian traffic during the peak periods.

Mitigation

No mitigation measures would be necessary.

No Action Alternative

Under the No Action Alternative, the proposed facilities of the Judiciary Square Master Plan would not be constructed or renovated. Therefore, there would be no impacts to pedestrian/bicycle circulation as a result of the No Action Alternative.

4.4 Physical/Biological Resources

4.4.1 Air Quality

Master Plan Alternative

Construction and renovation activities would affect air quality as a result of: (1) construction vehicle and equipment emissions, including construction truck haul trips for building materials and removal of solid waste/cut soil, and construction worker commuting; and (2) fugitive dust from excavation for garages, and earthmoving. Emissions produced during construction would vary daily depending on the type of activity.

As stated in Section 3.4 of this EA, the Washington Metropolitan Area is a non-attainment area for ozone. Therefore, federal actions must conform to the area's air quality management plans for ozone attainment. The specific types of construction equipment that would be used for the excavation, utility, and facilities construction, and the precise construction schedules have yet to be defined. Once these are determined, the potential emissions can be estimated based on the type of land use, the gross floor area of facilities to be constructed, the volume of excavation, number and type of equipment to be used, construction duration, and emission factors used. However, given the scale of projects that would be undertaken as part of the Master Plan, it is unlikely that the estimated emissions would exceed the *de minimis* threshold levels and the area's annual emission budget.

Once the Master Plan is implemented, additional pollutant emissions may be generated by the burning of natural gas for water and space heating. Emissions from the burning of natural gas are estimated based on the volume of space to be heated and the emission factors used. In addition, any increased vehicle trips would add additional mobile emissions. These emissions are predicted to be less than the *de minimis* thresholds and less than ten percent of the projected area emissions due to minor increases in building size and commuting employee vehicles.

In addition to the regional impact of vehicle emissions, it is necessary to consider the potential for local carbon monoxide (CO) "hot spots", which are high CO concentrations from vehicle emissions at congested intersections or roadway segments. The Metropolitan Washington area is in attainment for CO. Therefore, in accordance with the *Transportation Project-level Carbon Monoxide Protocol (1997)*, only projects that worsen air quality such as increasing delays at intersections operating at LOS E or F should be further examined for CO impacts. The traffic analysis indicates that the intersections in the study area currently operate at LOS D or better, except for the 3rd and F Street, NW intersection (stop sign control) which operates at LOS E during the PM peak hour. However, the proposed action will only create a minor increase (3 percent) in employees and their vehicles in the area, which is not anticipated to increase delays at this intersection. In addition, proposed traffic mitigation for the study area includes provisions for converting the stop signs at this intersection to traffic signals to improve LOS. Therefore, there are no CO impacts anticipated as a result of this project.

In summary, the Master Plan projects, including Garage #1, are anticipated to result in only minor, temporary air quality impacts and would be in conformance with the area's air quality management plan. General mitigation is provided to further minimize construction emissions.

Cumulative Impacts: The other construction and renovation projects proposed in the study area will add to the construction and operation emissions of the Master Plan projects. However, the various renovation and construction projects would generate minor construction and operational emission impacts. Since conformity with the area's air quality plan is based on annual emissions, project construction scheduling will likely determine the basis for conformity.

Mitigation

The general contractor and its subcontractors should implement best management practices during construction to reduce, minimize, or eliminate construction vehicle dust emissions. Two assumptions of construction emissions should be included in the specifications for the general contractor and subcontractors:

- Utilize commercial electric power for construction instead of portable generators wherever feasible.
- Apply water on active grading areas and material stockpiles to eliminate visible dust plumes during high wind conditions.

No Action Alternative

Under the No Action Alternative, the Judiciary Square Master Plan would not be implemented. Therefore, no construction, renovation, or operational emissions from the Master Plan would be generated. Thus, there would be no impacts to air quality as a result of the No Action Alternative.

4.4.2 Noise Levels

Master Plan Alternative

Renovation and construction activities would result in intermittent, short-term elevated noise levels that would vary daily based on the construction activity. Renovation activities would be predominantly restricted to building interiors. Exterior building renovation activities and equipment would not likely be a major noise source. Noise would be generated during excavations for the underground garages, and by heavy trucks hauling construction and renovation waste, excavated soil not used for fill, and concrete and building materials to the site. The construction equipment anticipated for the project includes jack hammers during renovations; bulldozers, scrapers, backhoes, and trucks during excavation; backhoes during utility construction; and concrete mixers and pumps, saws, hammers, cranes and forklifts during garage and museum construction. Based on the geotechnical report for Garage #1, no pile drivers are anticipated to be used (Froehling & Robertson 2001).

Nevertheless, there are no sensitive noise receptors on the construction sites. The District of Columbia limits weekday construction and demolition noise to 80 dBA Leq from 7 a.m. and 7 p.m., unless granted a variance. The construction equipment expected to be used on-site is capable of achieving this noise limit. Construction noise would occur during the daytime, and therefore, would not affect identified sensitive noise receptors adjacent to the site. As a result, no adverse noise impact is anticipated on-site. The movement of heavy trucks transporting materials could cause an adverse noise impact to residences if they are on or adjacent to the designated travel route during the evening or night hours. However, haul routes are anticipated to operate within the daytime construction hours specified above.

Noise generated from ventilation equipment for the underground garages and buildings is anticipated to be minor when added to the existing area noise levels. Noise at the surface would be limited to the sound of air discharging out of the vent, which would be elevated above the ground surface and away from the street. This noise level is not likely to be perceptible at the ground surface. Thus, there would be no adverse noise impact with the project activities.

Cumulative Impacts: The other construction and renovation projects proposed in the study area would add to the construction and operation noise in the area. However, construction noise is short-term and is not anticipated to occur at the same time for all of the projects. In addition, the various renovation and construction projects would generate minor operational noise impacts due to the limited increase in employees and visitors.

Mitigation

To ensure that the general contractor and its subcontractors implement best management practices during construction, the following measures should be employed:

- Prepare and implement a construction management plan to comply with District noise regulations to ensure that short-term construction-related noise is mitigated and noise levels between 7:00 a.m. and 7:00 p.m. would not exceed 80 dBA at a distance of 25 feet outside the construction site boundary.
- Select truck routes that would minimize the potential for noise impacts from trucks to sensitive receptors, particularly during the hauling of excavated soil.

No Action Alternative

Under the No Action Alternative, the Judiciary Square Master Plan would not be implemented. Therefore, no construction, renovation, or operational noise from the Master Plan would be generated. Thus, there would be no impacts to noise levels.

4.4.3 Natural Resources

Master Plan Alternative

Water Resources: During construction of the proposed garages, the existing ground cover would be disturbed and exposed, thereby potentially transporting sediments eroded by stormwater runoff. Groundwater is expected to be encountered during excavation. Dewatering during construction and installation of a subdrainage water system would be required to ensure groundwater stays below the elevation of the lowest slab floor elevation.

Soils and Topography: Building restoration and construction would not adversely impact geology, topography, or soils. The new underground garages would require excavation of approximately 1.5 million cubic yards of soil. Excavated soil may be suitable for structural and landscape fill, if not contaminated by pollutants.

Vegetation and Wildlife Habitat: The Master Plan would require the removal of the existing vegetation within the excavation sites. In addition to the excavated areas, vegetation along the streets is likely to be affected by construction of the new building entrances. Birds and rodents currently using the site would likely disperse at the onset of construction activities. However, once the site is replanted with a net increase in vegetation, similar wildlife that is adapted to the urban environment would likely return to the site.

Cumulative Impacts: The other construction and renovation projects proposed in the study area would add to the natural resource impacts of the area. However, construction impacts to natural resources are short-term and are not anticipated to occur at the same time.

Mitigation

To minimize the potential adverse natural resource impacts resulting from the implementation of the Judiciary Square Master Plan, the following mitigation measures should be employed:

- Require sheeting and shoring of soil surrounding excavated areas.
- Avoid driving piles since the vibrations from this may cause excess stress upon the existing buildings.
- Remove and dispose of excavated soil at an appropriate facility based on further laboratory testing.
- Submit an erosion and sedimentation control plan and a stormwater management plan to the District of Columbia Department of Consumer and Regulatory Affairs (DCRA) prior to beginning construction activities. The erosion and sedimentation control plan should include measures to prevent erosion of cleared areas and the transport of soil and sediment. The stormwater management plan should address runoff and pollutant discharge. Dewatering measures should be implemented as appropriate. The installation of a subdrainage water system would ensure that groundwater levels stay below the lowest floor slab elevation during operations.

- Prepare a detailed landscape plan for the excavated and disturbed areas. This plan would identify new trees, shrubs, and grass for disturbed areas once construction of underground and hardscape structures is completed.

No Action Alternative

Under the No Action Alternative, the proposed facilities of the Judiciary Square Master Plan would not be constructed or renovated. Therefore, there would be no impacts to water resources, soil and topography, and vegetation and wildlife habitat as a result of the No Action Alternative.

4.4.4 Hazardous Materials

Master Plan Alternative

Implementation of Master Plan would involve selective renovation of building systems and the grading and excavation of soil that may be contaminated. Because of the age of the building, building materials removed during demolition or renovation potentially could contain asbestos, lead or other hazardous materials. Since soil borings in the area detected fill material, there is the possibility that soils could be contaminated by natural or manmade compounds. Environmental soil sampling and testing of areas to be disturbed during construction would reveal contaminant levels, whether they exceed EPA health and safety thresholds, and whether the soils could be used on-site as backfill or required remediation prior to disposal at an appropriate landfill. Should contaminants be found, the excavation and disposal efforts would be monitored by appropriate DC government officials and authorized US EPA officials.

Cumulative Impacts: The other construction and renovation projects proposed in the study area would add to the potential for hazardous wastes generated from excavated soils or renovated building materials. However, construction is short-term and the projects are not anticipated to occur.

Mitigation

To minimize the potential adverse impacts on hazardous materials that could result from the implementation of the Judiciary Square Master Plan, the following mitigation measures should be employed:

- Remove and contain hazardous waste materials including asbestos-containing materials (ACM) and lead-based paints consistent with applicable handling regulations by licensed contractors and trained personnel.
- Environmental soil testing for contamination should include analysis of soil samples by a certified lab, and removal and containment consistent with applicable handling regulations by licensed contractors and trained personnel.
- Collect, transport, and dispose of asbestos- or lead-bearing waste by a specially licensed contractor in accordance with the requirements of Title 40 CFR Volume 23 Part 763. Hazardous materials to be removed should be shipped consistent with applicable transfer regulations and procedures to a hazardous waste disposal facility. There are a number of such

facilities in the surrounding states, particularly in Pennsylvania, that are licensed to handle such material.

- Segregate wastes to reduce quantities of hazardous waste.
- Comply with EPA, DOT and all other applicable federal, state, and local regulations for hazardous waste containers. All hazardous waste containers should be completely sealed and shall be checked for tightness prior to removal from the work area.
- Provide one copy of the completed Hazardous Waste Manifest no less than five days prior to the scheduled date of removal from the site.
- Haul hazardous wastes by a licensed hazardous waste hauler with permanent labeling.
- Dispose of hazardous and non-hazardous waste in accordance with all federal, state, and local regulations.

No Action Alternative

Under the No Action Alternative, the proposed facilities of the Judiciary Square Master Plan would not be implemented. Therefore, there would be no building restoration or garage excavation. However, any hazardous building materials present in the buildings, including lead-based paint and asbestos, would also remain. With age and deterioration, these materials could be exposed to employees and visitors.

4.5 Utilities/Infrastructure

4.5.1 Stormwater Systems

Master Plan Alternative

During construction, the Master Plan would expose soil to wind and stormwater erosion, thereby creating a potential for sediment transport into the stormwater system. However, upon implementation, the Master Plan would reduce the amount of impervious surface area by 1.73 acres with the conversion of surface parking to landscaped areas. This would be a decrease of approximately 11 percent of the impervious surface in the Master Plan area. The proposed garages would have soft landscape above the roof that would delay stormwater discharge during peak storm events. The decrease in the volume of stormwater runoff that goes directly into the stormwater system during peak storm periods would increase the available capacity of the stormwater system and is anticipated to be a minor positive impact.

Cumulative Impacts: The other construction and renovation projects proposed in the study area would add to the stormwater runoff in the area. However, the Master Plan projects would decrease the amount of impervious surfaces and help offset the adverse stormwater impacts in the larger area.

Mitigation

To minimize the potential adverse impacts on stormwater systems that could result from implementation of the Master Plan, the following mitigation measures should be employed:

- Use the appropriate best management practices (BMPs) to prevent construction sedimentation in the stormwater runoff to minimize the impairment of the stormwater system.
- Ensure that the soil above the parking garage allows for some temporary retention of stormwater during major storm events to prevent water from discharging directly into the stormwater system.
- Consider the use of Low Impact Development Practices (LID) during detailed site design to manage stormwater run-off and include measures such as providing grass swales to reduce runoff velocity and allow filtration along pedestrian pathways.

No Action Alternative

Under the No Action Alternative, the Judiciary Square Master Plan would not be implemented. Therefore, there would be no potential for sedimentation in the stormwater system. Thus, there would not be a decrease in impervious surface area, resulting in positive stormwater runoff impacts.

4.5.2 Wastewater Systems

Master Plan Alternative

Wastewater generated in the Judiciary Square Master Plan area is not expected as a result of the Master Plan. The proposed new or expanded facilities would generate a minor increase in wastewater.

Cumulative Impacts: The other construction and renovation projects proposed in the area would add to the cumulative wastewater generated in the area. However, these projects are expected to generate a limited amount of wastewater that can be met by the existing system.

Mitigation

No mitigation would be necessary.

No Action Alternative

Under the No Action Alternative, the Judiciary Square Master Plan would not be implemented. Therefore, wastewater generation would not increase.

4.5.3 Water Supply Systems

Master Plan Alternative

Water supply demand in the Master Plan is not expected to increase since there are no new or expanded facilities that would generate an additional water supply demand. The proposed parking garages and building additions and renovations would not require substantial amounts of water.

Cumulative Impacts: The other construction and renovation projects proposed in the study area would add to the consumption of water supply in the area. However, these projects are expected to generate a limited demand for water that can be met by the existing supply.

Mitigation

No mitigation would be necessary.

No Action Alternative

Under the No Action Alternative, the Judiciary Square Master Plan would not be implemented. Therefore, water supply demand would not increase.

4.5.4 Energy Supply Systems

Master Plan Alternative

The proposed building expansions associated with the Master Plan would increase the demand for energy. The additional building space would require additional natural gas/steam/electricity for heating, air conditioning, lighting, and operation. However, when compared to the existing building area, the proposed expansions would represent a minimal increase in floor area. Thus, the additional energy required for heating, air conditioning, lighting, and operation would be minimal.

Cumulative Impacts: The other construction and renovation projects proposed in the study area would add to the cumulative electrical supply consumed. However, these projects are expected to generate a moderate demand for energy that can be met by the existing supply.

Mitigation

No mitigation would be necessary.

No Action Alternative

Under the No Action Alternative, the Judiciary Square Master Plan would not be implemented. Therefore, energy supply demand would not increase.

4.5.5 Solid Waste Systems

Master Plan Alternative

Renovation and construction activities associated with the implementation of the Master Plan would generate non-hazardous solid waste. The short-term generation of solid waste would have a short-term impact on the existing method and frequency of collecting, hauling, and disposing of solid waste.

With the implementation of the Master Plan, there would be a negligible increase in employees and visitors within the area. Thus, there would be a minor increase in the amount of solid waste produced in the area. Overall, the generation of solid waste is not expected to significantly affect the collecting, hauling, and disposing of solid waste in the Master Plan area.

Cumulative Impacts: The other construction and renovation projects proposed in the study area would add to the cumulative solid waste generated in the area. However, these projects are expected to generate a moderate amount of solid waste that can be met by the existing system.

Mitigation

To minimize potential adverse impacts to solid waste systems that could result from the implementation of the Master Plan, the following mitigation measures should be employed:

- Recycle building material to the fullest extent possible.
- Promote cost-effective waste reduction and recycling activities.

No Action Alternative

Under the No Action Alternative, the Judiciary Square Master Plan would not be implemented. Therefore, solid waste generation and disposal would not increase.



CHAPTER 5: APPENDIX

5.1 LIST OF ACRONYMS

Federal Agencies

ACHP Advisory Council of Historic Preservation
CEQ Council on Environmental Quality
EPA Environmental Protection Agency
GSA General Services Administration
NCPC National Capital Planning Commission
NPS National Park Service

District of Columbia and Regional Agencies

DCOP District of Columbia Office of Planning
HPD Historic Preservation Division
DCRA Department of Consumer and Regulatory Affairs
ERA Environmental Regulation Administration
DDOT District of Columbia Department of Transportation
DPW Department of Public Works
MWCOC Metropolitan Washington Council of Governments
SHPO State Historic Preservation Office

Regulatory and Other Terms

APE Area of Potential Effect
CFR Code of Federal Regulations
EA Environmental Assessment
LOS Level of Service
NAAQS National Ambient Air Quality Standards
NEPA National Environmental Policy Act of 1969, as amended
NHPA National Historic Preservation Act of 1966, as amended
NLEM National Law Enforcement Museum
MOA Memorandum of Agreement
QC Quality Control

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